

Knowledge and Behavior towards HIV/AIDS among Young Street Prostitutes in Tehran

Payam Roshanfekr¹
Saeed Madani Ghahfarokhi^{*2}

Received 25 January 2019; Accepted 18 May 2019

Abstract

This article discusses some of the findings of a study on street prostitutes in Tehran with a focus on HIV/AIDS risk behaviors. It aims to show the extent of their knowledge and attitude about HIV/AIDS and available services and their behavior. This is an “extensive” and “cross-sectional” study, in which the target group was questioned about their background and socioeconomic status in addition to completing a standard questionnaire (BBS). Both qualitative and quantitative methods were used to gather data. The study sample consists of 300 women working in all 22 districts of Tehran. Only 8% of respondents answered correctly to all questions regarding their knowledge about HIV/AIDS related issues. 67% of them did not know where to obtain information and access consultation services. Although approximately 65% of them were aware of role of condom in HIV transmission prevention, only 54.4% of them used a condom in their last sexual encounter with costumers. Qualitative data show a stronger relation between condom use and fear of pregnancy and other sexually transmitted diseases (STDs) than concerns about HIV transmission and AIDS. We do not have any data regarding HIV transmission rate of prostitutes and their role in Iran’s current third wave of the HIV/AIDS epidemic, however, their knowledge and awareness about HIV/AIDS is less than other high risk groups (intravenous drug users, prisoners and homosexual men). The only promising point is the existence of greater awareness and knowledge among younger prostitutes. However, there is an urgent need for greater education and information dissemination regarding HIV/AIDS among this specific group.

Keywords: AIDS, Prostitution, High risk groups.

1. Assistant Professor, Department of Social Welfare Management, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran, roshanfekr.payam@gmail.com

2*. Ph.D. in Criminology, University of Social Welfare & Rehabilitation Sciences, Tehran, Iran, saeid.madani@gmail.com (Corresponding author)

1. Introduction

As Iran's first reported case of AIDS was a 6 year old hemophiliac child who became infected with HIV from a contaminated blood transfusion, the initial attention and focus were oriented towards blood products and hospital hygiene. Later, the increasing role of needle-sharing practices in HIV transmission rates redirected the attention to addiction and its consequences. Nowadays the role of sexual relations in HIV transmission is the focal point of the discussions about HIV/AIDS transmission. In addition to specific characteristics of each period, the media and political discourses have also influenced AIDS prevention and intervention programs.

An Increase in the share of sexual relations in HIV transmission could be representative of an increase in high risk sexual relations, hidden unprotected sexual relationships outside marriage and/or an increase in demand for prostitutions. In recent years, the government authorities have overcome their reservations and accept implicitly or explicitly the entrance of Iran in a third wave of the AIDS epidemic. Despite stereotypes and exaggerations, it is not simple to estimate the role of prostitutes in this epidemic and determine the culpable party, unaware prostitutes or their unaware clients, without further more research. We should also have in mind that women themselves could be the greatest victims of this current wave of the AIDS epidemic in Iran.

This article discusses some of the findings of a study on women prostitutes in Tehran and aims to investigate their knowledge and awareness of HIV/AIDS.

2. Review of Literature

Although the number of reported HIV/AIDS cases in the middle of this decade (2000 to 2010) is low (Ruxin et al., 2005), according to WHO and based on new data, the AIDS epidemic is significantly increasing in Iran. According to the data collected by educational hospitals of the Ministry of Health, a total number of 22727 persons have been infected by HIV virus by April 2011(UNDP, 2001). Meanwhile, independent organizations like the World Health Organization estimate that more than 80 to 100 thousand people are

infected. Most of the people infected with HIV are between 25 and 34 years old (46.6%) and this is a concern in light of Iran's young population structure.

The most frequent ways of transmission in Iran are recognized as: Needle-sharing practices among addicts, unknown reasons and last, sexual relations.

Responsible medical centers report that 60% of transmissions occurred through needle-sharing practices; in Iran, more than 2 million people registered as drug addicts, among them 300 hundreds are intravenous drug users (Gheissari, 2009).

An investigation of authorities' statements and warnings demonstrate the gradual change of HIV transmission patterns, from needle-sharing to sexual relations. From early 1990s, the authorities express deep concerns regarding an increase in HIV rate, while warning about the change of HIV transmission patterns, from needle-sharing to sexual relations. The Deputy Minister of Health announced that 8.4% have been infected through sexual relations and the transmission mode among 21.4% of patients is unknown. He claims that 90% of newly infected people get the virus through sexual relations (*Etela'at* newspaper, 12/12/2002).

A report by the Health Ministry, which was issued for the occasion of the International AIDS day, stressed that the prevalence of drug addicts among HIV infected persons should not diminish attention from significance of transmission through sexual relations. "[This problem] should serve as a warning signal about high probability of infection through unprotected sexual relations in the country" (*Etela'at* newspaper, 12/12/2002)

Despite numerous discussions and disagreements between government authorities and experts about the share of sexual relations in HIV transmission, the former has increasingly issued warnings about the spread of the AIDS epidemic through sexual relations (*Etela'at* newspaper, 20/7/2004). Controversies led to a reaction from Minister of Health, announcing "The transmission pattern of HIV is changing from needle-sharing to sexual relations" (*Etela'at* newspaper, 1/9/2004). In April 2005, newspapers started to emphasize on role of prostitutes in HIV transmission, AIDS prevalence among them and also {the dangers} of having multiple sexual partners among married

men, announcing that two third of women in Iran get infected by their husbands (*Jaam-e-Jam* Newspaper, 4/4/2005).

Finally, a member of the National AIDS commission, publicly recognize that the prevalence of transmission through sexual relations is equivalent to transmission through infected needles (*MardomSalary* newspaper, 14/8/2005)

According to the latest records, announced by the Head of AIDS Office in the Ministry of Health in 2010, HIV transmission in Iran occurs through infected needles in 66.9% of cases and in 21.1 percent of cases through unprotected sexual relation. In comparison to the average of previous years, which were 69.9% through needle-sharing and 10% through unprotected sex, we see an exponential increase in transmission through sexual intercourse.

Considering the above statements on the one hand and the hidden nature of prostitution on the other, it is fairly difficult to scientifically estimate the direct and indirect (by unfaithful husbands) share and impact of this phenomenon on the spread of HIV. Another vague issue is the extent of prostitutes' knowledge and awareness about HIV/AIDS, containing transmission and prevention methods and the impact of this awareness on decreasing the transmission and infection.

The internal studies on prostitution have paid little attention to sexual health and prostitutes' knowledge about it. Although some studies have investigated prostitutes' knowledge on contraceptive issues and pregnancy in general.

Farmanfarmaian (1968), Ardalan et al., (2002) and Varvaei (2005) have studied the contraceptive methods used by prostitutes, furthermore Ardalan's study has focused on runaway girls who have experiences prostitution (Ardalan et al., 2002).

Reviewing these 3 studies demonstrate a rise in condom use has been reported in two later studies comparing to Farmanfarmaian's study (Farmanfarmaian, 1969) increasing from 5.3% in 1968 to 65% in recent years. This is also true in the case of contraceptive pills, as prostitutes usually prefer pills to condoms.

Pregnancy history could also be representative of prostitutes' knowledge about prevention methods and the findings of relevant articles reveal a progress in this area too.

While the Farmanfarmaian's study (Farmanfarmaian, 1969) shows that 60% of prostitutes never experienced pregnancy, this has increased in recent years to 85% and could be a sign of increasing awareness about sexual issues or of greater availability of contraceptive methods.

In Iran, research about HIV/AIDS awareness and prevention among high risk groups (prostitutes, prisoners, homosexual men and youth with risky sexual behavior) has been limited and sporadic.

Based on The National Report of the AIDS Office (2006), in which 3060 intravenous drug users were surveyed to ascertain their knowledge of methods to prevent transmission and also their false beliefs, only 23.7% had full knowledge. Also 32.8 % of the sample used condoms during their sexual intercourses and 74.5% of them used clean and safe needles while injecting drugs. This paper also reviews and meta-analyzes 45 articles and reports between 2005 and 2008 and finds that 55.1% of people between 15-24 years are aware of the role of condom role in AIDS prevention, 76.7 % are aware of the possibility of having healthy appearance among HIV-infected people, 61.6% know that the virus cannot be transmitted by mosquito bites and 76.4% know about the impossibility of transmission through food-sharing practices. In the case of prisoners, 79.2% were aware of condoms' impact, 85.2% of having healthy appearance, 37.3% of the impossibility of transmission by mosquito bites and 59.2% of impossibility of being infected by food-sharing practices. In the case of intravenous addicts, results show a 83.2% , 76.5%, 43.5% and 66%, respectively, while for men having sex with other men (MSM), the results are 71.7%, 68.8%, 19% and 53.5%. This report also acknowledges that reliable data is not available about the prevalence of condom use among youth with risky sexual behaviors and among men who have sex with men (MSM).

3. Methodology

This is an extensive and cross-sectional study in which the target group (prostitutes) has been questioned about their background, behavior, knowledge, attitudes and beliefs. Both qualitative and quantitative methods have been used to gather data.

3.1. Definition of Prostitution

In this study, the prostitute is defined as a woman who provides sexual services in exchange for money or goods, as a profession, livelihood method or money making activity and outside legal and religious laws. Furthermore, at the time of conducting this research project she was not in jail or in custody of the centers of the Welfare Organization.

3.2. Statistical Population, Sample Size and Sampling Method

The statistical population of this study is compound of women who work as prostitutes in the 22 districts of Tehran metropolitan, of which no accurate information is available on their numbers and demographic characteristics. In addition, they do not have any discernible gathering or living areas, which leads to difficulty in accessing this group. The sample size is calculated using the sample number formula in studies of hidden populations and is estimated to be about 300 (USAID, 2000).

Although prostitution is not mentioned in Iranian law, it is considered to be a crime, so prostitutes are members of hidden populations. In order to study their situation, we divided them into sub-population or primary sample units.

This study has used the multi-stage cluster sampling method, in which first a list of large gathering units is developed. "Primary sampling units" or so-called "clusters" can be neighborhoods, squares, streets, parks, brothels or cabarets.

Their Stomping grounds were identified and selected based on previous studies (Ministry of Health and Medical Education, 2006; Varvaei, 2005). It is worth noting here that these locations are not necessarily equal in terms of distance and size (Pisan, 2003; USAID, 2000). In this study the common locations for finding clients like streets, squares, parks and shopping centers were selected as primary sampling units.

A sample size equivalent to 300 people- in 40 units, each containing 6 to 8 people, were designed and selected. Table 1 demonstrates the details of these units in this study.

Table 1. Characteristics of sampling clusters

Region	Districts numbers	Minimum number of clusters	Sample Size	Neighborhoods
North	1,2,3,4	16	120	Tajrish-Darband-Darakeh-Velenjak-farmanieh-Gheyta-rieh- Chizar- Lavizan- Shahrake Gharb-Kuye Nasr- SaadatAbad- Parkway- Vanak Square- Mirdamad-Africa
West	5,9,18	9	67	Azadi Square- Sadeghieh- Poonak
Center	6,7,10,11,12	5	38	Enghelab-Daneshjoo Park- Laleh Park-Tohid Square- Bazaar- Ferdosi- Molavi
East	8,13,14	7	53	EmamHossein(NezamAbad, EshratAbad, Namjoo)-Resalat Square-TehranPars- Piruzi-Afsarieh
South	16,17,19,20,21,22	3	27	Khazaneh- NaziAbad-RahAhan-Javadieh
Total		40	300	

In every primary unit the given sample was selected using the snowball sampling method (Pisani, 2003). Qualitative data were collected through in-depth interviews with 18 prostitutes and 21 key informants- including judges, social workers, physicians, professional pimps and retired prostitutes- and through nine ethnographic reports.

3.3. Data Collection Methods

The following three sources were used to collect data in this study:

- 1- Literature review (secondary research)
- 2- Structured interviews: The questions regarding AIDS were extracted from the Behavioral Surveillance Survey (USAID, 2000) questionnaire and modified according to the specific local context. In the next step, a pilot study was done, which was evaluated and modified by a group of experts.
- 3- In-depth interviews (semi-structured)

4. Findings

4.1. Demographic and Contextual Characteristics

The mean age of the sample is 27.6 years. This sample includes women between 15 and 53 years of age, nearly 58.9% are less than 27 years old. The mode is 26 and the age group of 25-27 years, which have the highest population density of 21.4%.

Among the women who have declared their education level, 4.5% are illiterate and 82.6% have primary or secondary (12 years of schooling) education. Most of them have secondary education and 12.9% have upper-secondary education.

43.1% of women were born outside the Tehran province and later migrated to this province. More 50% of them were born in 6 provinces: Gilan, Mazandaran, Khorasan, Markazi, Kermanshah and East Azarbaijan.

4.2. Prostitution History

The mean number of years in prostitution is 5.8 in this sample, with a 3 year history, having the most frequency and the years working in prostitution vary from 1 year to a maximum of 31 years. 70.48% of respondents began prostitution after 2001 (5 years before this study) and only 3.69 % of them entered prostitution before 1991.

4.3. Knowledge and Attitude towards HIV/AIDS

4.3.1. Knowledge on AIDS Transmission

97.5% of the women have some awareness about AIDS. Only 25.4% of them know someone who is infected with HIV or have died because of AIDS. 8.4% of respondents know friends or close relatives with AIDS.

In order to evaluate prostitutes' knowledge about the HIV virus and their false beliefs about it, 5 questions were asked:

- 1) Is the danger of HIV transmission reduced by having only one healthy sexual partner who has no other sexual partner?
- 2) Can a person with AIDS, reduce the danger of HIV transmission by using condoms in every sexual encounter?
- 3) Can a person with HIV/AIDS appear healthy?
- 4) Can someone become infected with AIDS/ HIV through a mosquito bite?
- 5) Can someone get AIDS from sharing food with someone who has HIV/AIDS?

The rate of the people who answer all these 5 questions correctly is one of the indicators in report and evaluation of AIDS knowledge in members of USAID (USAID, 2002). In this study, the percentage of women answered each

of the questions correctly is: 35.01(question 1), 64.9(question 2), 55.8(question 3), 44.5(question 4) and 63.9 (question 5) while only 8% have answered all 5 questions correctly.

The findings of the in-depth interview with key informants-especially prostitute themselves- show a different range of knowledge among them regarding HIV transmission.

Some of the women have fairly complete knowledge about this, as indicated below:

“I know, it is transmitted through intercourse and through blood transfusion. You can even get it from dentistry, I mean when infected blood contacts your gums. Perhaps you have done nothing and you get it. I know that there isn't a problem as long as the semen doesn't enter the vagina. I know this. We usually use condoms too” (32 years old, with 6 years' history, has not used condoms in the last 12 month)

“I completed a nursing course before entering this business and I can also tell you that if you call the Health Office, they will tell you everything about it” (26 years old, started prostitution at 18, has had an AIDS test and has fairly complete knowledge about HIV/AIDS)

The second group has relative good knowledge of HIV/AIDS, while a third group has false information and beliefs regarding this disease. Physician and manager of an AIDS and Hepatitis prevention program recalled a session in which most of the prostitutes assumed that anal sex was a safer mode.

4.3.2. Sensitivity about Disease

Sensitivity about the disease and the probability of being infected varies according to the health and work status of prostitutes. A 22- year-old woman, who began prostitution at 18 and has not taken an HIV test, declares:

“There are two groups of us; 50% are very cautious and take care of themselves, because they need to remain healthy in order to attract wealth and powerful clients. But the other 50%, the addicts, say we are devastated, let us have gonorrhoea, AIDS or any other disease. They don't care and say they need to earn money in order to feed themselves”

A 16 year old, who started prostitution 2 years ago and has never taken an HIV test, says:

“Women like us have lost everything in their lives and enter this job, so there is no difference between AIDS and any other disease”

And a 16 years old, who has started prostitution in 14 and has never taken an HIV test, declares:

“The ones whom I know are young and they care more about the money, not peripheral issues”

One of the researchers of this study recalls:

“Among the 24 cases (sample), there were 2-3 cases that paid attention to prevention and had also taken the HIV test. But the others did not pay attention and did not want to accept their situation. They had given up everything. ... They don't want to even think about it ...”

But some of these women are sensitive to this issue. A fortune-teller, who was acquainted with many prostitutes, said the following about one of them:

“She was living with 4-5 other people. She had tried to give them information about it in order to prevent them from getting sick. She was really sensitive to AIDS. For instance, if she knew that a man comes from prison, she would try to avoid him or she would not let him in her house. She was really concerned about the younger beginner prostitutes.”

It seems that clients' sensitivity regarding HIV transmission and STDs also differs. A 35- year- old woman who entered into prostitution 15 years ago and has taken a test, talks about the sensitivity of clients:

“{I understand their concern} through the questions they asked and through their anxiety. Even some of them have asked if I have taken an AIDS test. They want to see the test's negative results. They ask these questions out of the blue.”

A 15 year old, who started prostitution a year ago and who has never used a condom, mentions the importance of age and addiction in knowledge about HIV transmission:

“If the client is a newcomer, and a silly young kind, then he knows nothing. But many of them are addicts and already devastated and unhealthy, so they don't care about anything, even AIDS. But the older ones are really cautious.”

They are very sensitive to cleanliness, to using condoms, among other things. Of course, those who work in related fields-like doctors- are even more sensitive.”

A 38 year old woman who has spent 18 years in prostitution also related the sensitivity of clients to their education and their social status.

4.3.3. Knowledge about Prevention Centers

70% of women were not aware of the possibility of taking a confidential HIV/IDS test in Tehran or denied this possibility. A 26-year- old woman, who entered prostitution 2 years ago and who has never taken a test, says:

“If you go to take a test and they discover that you are infected, they arrest you and take you somewhere We do not trust the government. They cannot take care of women in this job. Because there are too many of them. And these women don’t trust them at all”

On the contrary, a 38 year old who has spent 12 years in prostitution and has not never been tested, declares:

“If everyone knows that they give free condoms at the Health Centers and that they will not be threatened or harmed, then they will accept {to go and have a test}”

4.3.4. Getting Knowledge about the Disease

67% of women do not know where to get information and counseling about AIDS prevention. Among the ones that claim to know where to get information about AIDS, 48.4% have pointed to clinics or hospital, 22% mentioned physicians and finally 16.5% identified the Iranian Blood Transfusion Organization (IBTO) as the most convenient places to get information and counseling.

4.3.5. Knowledge regarding Information and Counseling Centers

26% of women felt that referring to people or centers for more information could have some potential danger for them.

4.3.6. Beliefs about AIDS treatment

The 36 respondents (12.5% of sample population) who believe AIDS is treatable, prioritize treatment agents respectively: physicians (45.2); hospitals (22.6); special centers for AIDS treatment (16.1).

4.3.7. HIV Test History and Knowledge about Test Centers

40.7% of prostitutes claim that they do not know where to go for HIV testing. Among the women who claim to know the test centers, 65.8% mentioned clinics, hospitals and laboratories as test centers, while IBTO has the least frequency by 12%.

4.3.8. History of Test Taking

Only 30.3% of women have taken an HIV/AIDS test, of which 21.8% of them were required to do so mandatory and by a cosmetic surgeon (47.7%), Prison Organization (31.6%), hospital (10.5%) and the police or a sexual partner. 98.8% of women who were tested, know their test results, while 69.8% of them have taken the test within a year of this study.

The findings also show that many women were not tested because they feared being arrested and also concerned to cope with test results.

The women, who have taken the test, experienced different behaviors and treatments from laboratory staff.

A 38-year-old woman says:

“Yes. I did it once...They were not nosy... There was no problem, no bad behavior”

Another 22- year -old prostitute recalls:

“I visit an Obstetrician sometimes and s/he does not treat me in a bad or rude way. S/he orders a complete check-up test and blood and vagina test and everything else. Then I go to the laboratory. When they see that my test also includes AIDS, hepatitis and gonorrhoea, they do not react. They do not care, they just take the samples.”

But there are also bad experiences. A 25-year-old who introduced herself as a prostitute at the time of testing, says:

“When I went to take the test 4 years ago, I told them that I am in this business and I want to see if I am sick or not. They gave me a hard time. They sent me to a psychologist and s/he talked with me and then I took the test but they got my ID card. When I got the results and it was negative, they gave my ID back, but they made it very difficult for me.”

Of the prostitutes who were tested, most had spent some time in prison and were forced to take the test or were required to do so as a prerequisite for cosmetic surgeries. For instance, a 26-year-old woman tells:” yes, I took it 2 months ago. It was mandatory for nose surgery. It was negative”

A 20 years old prostitute also says:

“I have been to prison 3-4 times. When you first enter the prison, they take you for addiction, Aids, Hepatitis and other tests... When I went to prison, they also tested me. They treated me normally.”

This research also studied the effects of 2 groups of contextual variables (age, education and marital status) and professional variables (weekly income, stumping grounds and duration of prostitution) on prostitutes’ knowledge regarding HIV/AIDS.

4.3.9. Knowledge about HIV/AIDS

4.3.9.1. Having Heard about AIDS

In the first question, the women were asked if they had heard anything about HIV or AIDS disease before. In this case, statistical tests demonstrate that among contextual variables, education and age affected this variable: with an increase in age, the knowledge about HIV/AIDS decreases; or in other words, younger prostitutes know more about HIV/AIDS. This is also true regarding education in another way: The prostitutes with more education, having more information about HIV/AIDS.

Among the professional variables, only stumping grounds show a relevant relation with this issue. 100% of women working in the western districts and more than 98% of women in north and center of city reported that they have heard about HIV or AIDS.

In the second question, women were asked if they know anyone who is infected by HIV or have AIDS or have passed away because of it. Statistical

tests show that most women have given a negative answer to this question, regardless of their contextual and professional status and no variable shows a meaningful relation to this question.

The third question is about having an infected friend or close relative. There is a strong relation between locations of stomping grounds (rich/poor) and this variable. Women with a higher income from prostitution had a greater chance of having an infected friend or family member. 14%, 27% and 31% of the women working in the north, west and center of Tehran, respectively, responded positively to this question and had HIV-positive friends or relatives.

The fourth question focuses on whether having a single non-infected partner and being faithful to him, could decrease the risk of HIV transmission.

Education shows a strong relation to this question and among the professional variables, women working in a poor district gave more correct answers. Yet qualitative data shows that this is not a sign of having better knowledge regarding HIV transmission. AS one of the researchers of the study reports:

“They do have some information regarding AIDS, but their understanding of it is not accurate. For example, most of them said that they do not use a condom while having sex with their boyfriends, because they assume them to be faithful ...”

4.3.10. Modes of Prevention

The women were asked if HIV transmission could be prevented through using condoms during sexual intercourse. This question also aims at measuring their knowledge regarding AIDS and condom use. Age and education show a meaningful relation with answers to this question: Prostitutes above the age of 30 and those with less education have less knowledge regarding the role of condoms in HIV/AIDS prevention. Among professional variables, an increase in income and activity in richer districts shows an increase in correct answers and in a sense indicates more knowledge regarding prevention modes.

The second question asks about being infected and having a healthy appearance. Among contextual variables, age and education and among professional variables, income and stomping place have a meaningful relation

with this question. Thus a decrease in age shows an increase in positive answers to this question, which is in accordance with previous findings regarding the greater knowledge of younger women about AIDS. Furthermore, an increase in women's education is also found to be related to an increase in their understanding of the apparent effects of HIV/AIDS. The women with more income also show more knowledge about this subject.

4.3.11. Knowledge about Testing, Prevention, Counseling and Treatment Centers

The women were asked if it's possible for them to take a HIV/AIDS test confidentially in Tehran. The statistical analysis reveals that married and divorced women believe more than single women in the possibility of taking such a test. An increase in income also indicates an increase in positive answers to this question.

In another question, women were asked if they know where to get information and counseling regarding AIDS prevention. Women with higher education levels responded positively to this question in greater number, meaning that more educated women are more familiar with such centers. Among other contextual variables, women between 25-30 years of age and married prostitutes gave more positive answer to this question than other groups. Also women with stomping grounds in northern (rich) districts, know these centers better. An increase in income and years in prostitution also show an increase in knowledge regarding help centers.

Regarding knowledge about testing centers, an increase in age and education show an increase in knowledge. Also, women who spent more years in prostitution have more knowledge about these centers. This is also true in the case of women with more income.

On the subject of feeling safe and trusting these centers, divorced prostitutes feel more risk. Furthermore, women with stomping districts in eastern Tehran feel more anxiety and insecurity.

4.3.11.1. The history of HIV/AIDS Tests

In case of test taking, an increase in income shows an increase in test taking occurrence. Also, women with stomping grounds in southern and eastern districts were tested less than other women.

In all cases, younger and more educated women were more likely to have been tested. However, married prostitutes have taken the test more frequently than single and divorced ones. The probability of test-taking was higher among women with more than 5 year history of prostitution in comparison to women with less than 5 years.

5. Conclusion and Discussion

Street prostitutes are one of the high-risk groups in the transmission and infection of the HIV virus. Regardless of their share of HIV transmission and future changes in this area, their knowledge and awareness about this disease are critical to their own and society's health. The findings of this study show that most of the members of the sample (97.5%) have heard something about this disease, although only 25% of them really know someone living with HIV/AIDS or who have died from it. Only 8% of them answered all questions measuring their knowledge about HIV/AIDS correctly, while 67% do not have sufficient knowledge about information, prevention and counseling centers.

Only 30% of them have ever taken an HIV/AIDS test, which in 22% of the cases, was mandatory (in prison, under arrest or because of cosmetic surgery). The qualitative findings from in-depth interviews are also in accordance with the quantitative data and show that many women have not taken the test because of their fear of arrest, concerns about positive result or inability to cope with the positive results.

On the other hand, 98.5% of 280 women presented in this sample have given a positive answer to the question of hearing something about condom use and 97.8% of them know a person or location that provides it. Although about 64% of them were aware of the role of condom in prevention of HIV transmission, only 54.4 % of them used a condom in their last sexual intercourse with a client. Qualitative data show us that condom use is mainly targeted at prevention of pregnancy and other STDs, other than AIDS.

Table 2. Relation between contextual and professional variables with knowledge about HIV/AIDS

Questions	Prostitute women			Intravenous Drug Users(IDU)			Prisoners(male)			MSM		
	%Under 25	%25 and upper	%All correct answers	%Under 25	%25 and upper	%All correct answers	Under 25	25 and upper	%All correct answers	Under 25	25 and upper	%All correct answers
Knowledge of risk reduction by limiting sexual relation to a non-infected sexual partner	36.9	32.9	31.1	70.2	76.8	82.8	66.3	73.2	72	66.8	66	65.9
Knowledge of condom role in prevention	63.9	67.7	66.1	73.4	78.5	83.2	80.2	78.9	79.2	53.3	80.1	71.7
Knowledge of possibility of healthy appearance among infected people	68	48.1	56.8	60.7	69.2	76.5	79.1	86.5	85.2	45.1	79.2	68.6
Knowledge about impossibility of transmission by mosquito bite	41.8	46.8	44.6	42.4	46	43.5	27.9	39.3	37.3	22.1	17.7	19
Knowledge of impossibility of transmission by food-sharing	61.5	67.1	64.6	65.1	61.5	66	30	64.2	59.2	42.2	58.7	53.3
Correct answers for all 5 questions		6.3	7.9	11.0	21.4	23.7	9.3	25.6	22.7	4.5	11.7	5.3

Source: Authors estimations using Secretariat of National AIDS committee (2007)

This data also show a greater awareness regarding condom use among prostitutes, in comparison to other high risk groups (See diagram below).

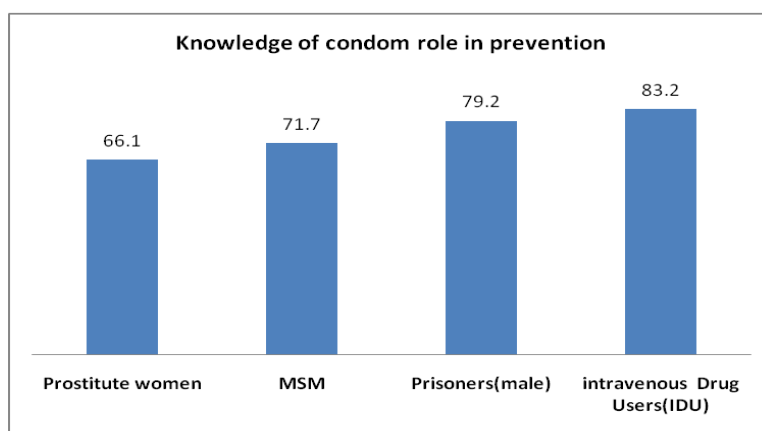


Figure 1. Knowledge of condom role in prevention

The only promising point in this data is the existence of greater awareness and knowledge among younger prostitutes. As the following diagram shows, this increase is only visible among prostitutes, not other groups.

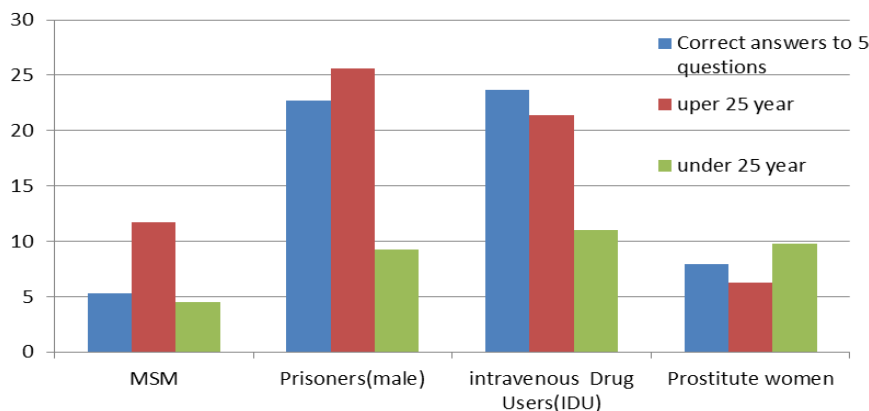


Figure 1. Answering all 5 questions correctly/ 25 and upper/ under 25/ Prostitutes/ intravenous drug users/ prisoners/ SMS

References

- Ardalan, K. , Holakouie, Mohseni, A., Jazaeri, A. (2002). Sexual relation, a path for survival: A study on run-away girls, *Social Welfare Quarterly*, 2(5), 187-197.
- Farmanian, S. (1969). *Prostitution problems in Tehran*. Tehran: School of Social Work.
- Gheissari, A. (2009). *Contemporary Iran's economy, society and politics*. Oxford: Oxford University Press.
- Pisani, A. (2003). *Estimating the size of populations at risk for HIV*. UNAIDS/IMPACT/FHI workshop.
- Ruxin, A., Binagwaho, P.A., Wilson, A. (2005). *Combating AIDS in the developing world*. UN Millennium Project Working Group on HIV/AIDS.
- UNDP. A.(2001). *The prevention and control of HIV/AIDS in Iran*.
- USAID, A. (2000). *Behavioral surveillance surveys*. United States Agency for International Development & the United Kingdom.
- Varvaei, A. (2005). *A study on factors contributing to street prostitution in Tehran*. Tehran: Tehran Publication.