

Knowledge and Attitudes towards AIDS in Mashhad (Northeast of Iran) Female Sex Workers

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ABSTRACT

Background: In view of the fact that knowledge and attitudes are important in control of individuals' behaviors and because female sex workers with their multiple sexual relationships are in highly risk to HIV and also an important factor in transmission of AIDS in the community. This study evaluates the female sex workers' knowledge and attitudes toward AIDS.

Methods: This research was cross-sectional descriptive study. The statistical population was female sex workers that were being supported by Welfare Organization in Mashhad (central of Razavi Khorasan province in northeast of Iran) in 2011. Sampling method was census. So the whole of 61 female sex workers were completed questionnaires of knowledge and attitude toward AIDS.

Results: The results showed that the knowledge of the transmission Incubation period and Prevention of AIDS, 64% of subjects were at the low level. The knowledge about methods of transmission of AIDS in the 57% of female sex workers also was low. The subjects' attitude toward prevention of AIDS, their willingness to cooperate in the implementation of preventive programs and their feeling of risk for 18% were negative and attitude of 61% of them were neutral.

Conclusion: Knowledge about transmission, incubation period and prevention of AIDS were in low level. Also their attitude to AIDS's prevention, cooperation in prevention programs and their risk feeling mostly was neutral or negative that can be an alarm.

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► *Implication for health policy/practice/research/medical education:* Attitudes towards AIDS in Female Sex Workers

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1. Introduction:

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AIDS, a fatal disease, was seen for the first time in fifth homosexual men in the United States in 1981. In 1983, the research teams in Europe and America at the same time identified the exact cause of the disease, and named human immunodeficiency virus (1). With spread of AIDS in the United States and developing countries, AIDS quickly

assumed as catastrophic proportions (2). Nowadays, 90 million people are suffering from this disease (1). In the early days of the AIDS epidemic among people, infected men were completely superior to women. In 1997, women were formed 41% of all HIV infected people, but now, this proportion has risen to 50% (3). In Iran, according to the Ministry of Health, 95% of the patients were male and 4.8% of the patients were women in 2006 (1).

The first case of this disease in Iran was reported in 1987, which had used the infected clotting factors which imported from France (3). So, the first wave of the disease began through contaminated blood products and second wave transmitted through infected syringes. But in recent years, the development of this disease through sexual promiscuity is concerned (3). Factors such as migration and family separation, family chaos and economic problems, increasing marriage age, internet abuse, false joys and fleeting emotions, street children who are sexually abused or street women are the major causes of the spread of AIDS (3). Transmission routs of the disease are 64% intravenous drug, 3% unspecified way, 7% sexual contact, 2% blood products, 50% from a mother who is infected to her baby (1). According to Ministry of Health reports, in recent years a new wave of the disease has begun through illegitimate sexual contact which role of street women in the prevalence of this disorder is notable. Women because of multi sexual relationships can quickly increase the spread of contagious sexually transmitted disease. These groups usually have non-protected sexual intercourse without using condom (4). Studies show that every street woman can established up to 9 sexual contact is each week (5).

Some factors that lead women involved in being "street" can pointed out poverty, without guardianship, lack of love and affection in the family, sexual abuse in childhood. Most of these people are from broken and fragmented families with background of childhood sexual abuse (4). Female sex workers are often desperate

people who have been separated from home and family and often come from small towns to big cities. According to the most programs targeted at HIV prevalence on female sex workers, have focused on changing behavior and especially condom use among those and clients and promoting condom use among female sex workers is as the most important way to control of AIDS spread in heterosexual relationship. Due to the high risk of HIV infection in female sex workers and high risk of transmission to general population, and lack of adequate research in this area, this study was carried out to evaluate the knowledge and attitudes towards AIDS in female sex workers in Mashhad.

2. Materials and Methods:

This is a descriptive cross-sectional study carried out on the population of female sex workers under the supervision of Mashhad welfare in the first half of 2011 after signing an informed consent. The population size was 61 participants and all the participants were living in that center, participated in study.

Knowledge and attitudes towards AIDS was collected with a man-made questionnaire. The questionnaire is divided into three sections: Section I) demographic characteristics such as age, occupation and education. Section II), Knowledge of AIDS, including 22 questions with three options (Yes, No, I do not know) contain of information about the routes of transmission, disease, incubation period, symptoms, prevention and treatment of the disease. The total score of knowledge includes the entire range 0-22 and is classified in four areas of poor, average, good and excellent. Part III) about attitudes towards AIDS that included subscales used to measure attitudes toward the need for preventive action by society, feel the risk of involvement of all people with the AIDS and willingness to cooperate in preventive programs. The questionnaire consisted of ten items with a response scale three states: disagree, neutral, agree. To calculate scores for each question according to the given answer was assigned a score of 1 to 3, which is the range of 10-30.

Therefore, the attitude of people towards HIV prevention is classified in the ranks of the poor, average and good. Data were analyzed using descriptive statistics.

3. Results:

Demographic findings showed that 61 female sex workers participating in the study were in the age range 13 to 45 years. Regarding educational level, 3.9% of the participants were illiterate, 65% primary school and 25% in secondary education and or diploma as well as 6% had university education. 89% of participants were unemployed, 9% self-employment, and 2% were students.

As the table 1 shows, knowledge of AIDS in 41% of participants is poor, 23% Medium, 24% good and 11% very good level. In other words, knowledge in 64% of participants is low to moderate level and just 36% had a good or very good knowledge. The knowledge subscales are shown in table 2. As can be seen in table 2 in the HIV transmission factor subscale, 64% are poor, and 36% had good knowledge, and in the incubation period and prevention of AIDS, 46% were poor, 42% moderate and 11% good (Table 3). The table 4 shows that 41% of female sex workers have little knowledge about AIDS treatment and 42% moderate and 16% good. In table 5 can be seen in the knowledge of HIV transmission, 57% of the female sex workers have poor knowledge and 42% fine.

Table 6 shows that the female sex workers in the area of HIV prevention, their willingness to cooperate in the implementation of preventive programs and to feel safe in this area, had 18% negative, 21.2% positive, and 60.7% neutral. The results show that 79% of female sex workers are neuter or negative about programs related to HIV prevention.

4. Discussion:

Aim of this study was to evaluation of the knowledge and attitudes towards AIDS in Mashhad female sex workers. Transmission routs of HIV are including sex, blood products, from a mother who is infected to her baby and injection with a shared syringe. The most common way of transmission in

the world is sexually transmitted. In our country, the most common way of transmission is via injection in drug users

Table 1: General knowledge of AIDS in female sex workers

Knowledge	Frequency	Percentage (%)
Weak	25	41
The average	14	23
Good	15	24.6
Very Good	7	11.4
Total	61	100

Table 2: Knowledge of HIV transmission factor in female sex workers

Knowledge	Frequency	Percentage (%)
Good	39	64
Weak	22	36
Total	61	100

Table 3: Knowledge of the incubation period, and HIV Prevention in female sex workers

Knowledge	Frequency	Percentage (%)
Weak	28	45.9
The average	26	42.6
Good	7	11.5
Total	61	100

Table 4: Knowledge of AIDS treatment in female sex workers

Knowledge	Frequency	Percentage
Weak	25	41
The average	26	42.6
Good	10	16.4
Total	61	100

Table 5: Knowledge of HIV transmission routes in female sex workers

Knowledge	Frequency	Percentage (%)
Weak	35	57.4
Good	26	42.6
Total	61	100

Table 6: Attitude towards AIDS prevention and cooperation in female sex workers

attitude	Frequency	Percentage (%)
Negative	11	18
Indifferent	37	60.7
Positive	13	21.3
Total	61	100

(63.9%) (6). Nowadays a new wave of outbreaks of this disease is spread through high-risk behavior in our country. Because

of the social stigma, high risk people do not dare for diagnostic visit (7).

General knowledge of women to AIDS that had majority risky sexual behaviors was in the medium to low level and was not satisfying. Investigation in knowledge about HIV transmission factors subscales shows 64% of total participants were poor and their knowledge about AIDS incubation period was the same. In terms of knowledge about the methods of HIV transmission, 57% of participants have been poor.

The other studies which have been done in terms of the AIDS knowledge cleared its range in 66% up to 80%. It should be noted that those studies were about different statistical community and the different results are explainable, especially in regards of Habibipour and Amirkhani showed that knowledge of 70% of the university students were in good and excellent level (8). Seyyed nozadi *et al.* showed that AIDS knowledge in 71.4% of the students were acceptable (9). Parastesh *et al.* in randomized visitors admitted to the exhibition showed that 74% the samples had good knowledge about AIDS and its treatment (10). But Etemad *et al.* in study on high risk population, showed almost the similar results.

Due to the anonymity of many high risk sexual behaviors women in the community, the present findings regarding female sex workers, explain the essential need for educating about AIDS/HIV for all segments of society through media. In this regard, number of studies mentioned on the effectiveness of public education. Chang *et al* on the impact of AIDS education in Chinese schools concluded that such training courses in schools if cooperates with life skills training, could be significant impression in terms of improving of knowledge, attitude and practice of students about AIDS and its prevention (11).

Mozaffarizadeh *et al* in Iran, Trajmen in Brazil and Nukacha in Nigeria have emphasized on the need to provide training in this issues as part of the education of undergraduates (12). Also Mansourian *et al.* have proposed that health education has had a significant effect on students' knowledge

about AIDS (13). According to research Sharifyzada, Moudi and Zendedel, educational interventions have a significant impact on students' knowledge (14).

Attitudes towards AIDS in female sex workers and their willingness to participate in preventive programs in this area and feel safe, 79% of the street women were either neutral or opposed. The result is an alarm for spreading the disease through high risk sexual intercourse.

This result is also incongruent with the results of other statistical study, because of the differences in the population studied. For example Mohebbi Nobandegany has been reported 54.3% of population studied, Momeni 77%, Poursheykhan 91.7% and Panahande 98% with positive attitude towards AIDS (11). Etemad *et al* in their study on attitude towards AIDS among injecting and sexual risk behavior groups have demonstrated that 49.6% of participants have negative attitudes towards (7). Balali Meybodi and zarand showed that the 16-35 years group and employees have had more positive attitude. Also the study showed that men were more positive attitude than women (11). This issue demonstrates the necessary of general media attention and education stakeholders such as schools, universities and the media takes with especial training help to improve their attitude.

Previous studies have also pointed out that for AIDS prevention and creating safe practices is needed to positive attitude and in the regard of the importance of raise knowledge in improving attitudes, it is recommended with the increasing of knowledge can be changed attitudes of individuals (11). Since attitudes can affect all aspects of a person's behavior, by raising public knowledge, attitudes can be changed (15). Parastesh *et al* showed that 74% of the subjects had good knowledge about AIDS and its treatment and 85% the subjects have obtained their information from family and friends (16). According to research Sharifyzada, Moudy and Zendedel educational interventions have a significant impact on students' attitudes (14).

5. Conclusion:

So, in the majority of female sex workers, knowledge of HIV transmission, incubation period of AIDS and HIV transmission was lower than average; which is emphasized education for all segments of society through different media. Also majority of the female sex workers were neutral or opposed to HIV prevention, prevention programs and or cooperation in this field which will have been alarmed. Hence the need for specific training to improve public perception of the media pointed out.

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