



High-Risk Behaviors Among Regular and Casual Female Sex Workers in Iran: A Report from Western Asia

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Abstract

Background: Female Sex workers are at risk of obtaining sexually transmitted infections, particularly human immunodeficiency virus.

Objectives: This study aimed at comparing the high-risk behaviours between regular and casual sex workers.

Methods: This was a cross-sectional study conducted on sex workers from February to December, 2015, in a city of northern Iran. The research recruited 184 sex workers, who had the inclusion criteria. Three sampling methods were used to recruit the subjects. The test was conducted at an error level of 5% using the SPSS software.

Results: The average age of the casual sex workers (32.53 ± 7.39) was older than that of regular sex workers, with a significant difference (P value < 0.05). A significant association was found between the 2 groups on the inconsistent use of condoms and working in brothels (P value < 0.05). The comparison of drug use before sex was not significantly different (P value > 0.05) between the 2 groups.

Conclusions: It is very essential to organize peer groups for outreach services for sex workers, which could be more appropriate and consequently decrease the relevant damage in these groups.

Keywords: Female Sex Worker, HIV, Iran, Risk Behaviours

1. Background

Female Sex Workers (FSWs) are at risk of contracting Sexually Transmitted Infections (STIs), and particularly human immunodeficiency virus (HIV). According to an UN-AIDS report, the prevalence of HIV in this group is estimated to be about 11.8%. As per global estimations, the chances of HIV infection among FSWs in low and moderate income countries are 13.5 times more as compared to other females in this fertility age group (1). Moreover, the clients of FSWs serve as a 'bridge population' to transmit HIV to other high-risk groups and the society, in general.

Furthermore, HIV epidemic in Iran has mainly been affected by the injecting drug users (IDUs), FSWs, partners of IDUs, and prisoners. Although, the HIV epidemic in Iran has largely been due to IDUs, yet transmission through heterosexual sex is on the rise (2). Sex and furthermore high-

risk behaviours are unspoken matters in Iran. Sex work is not only a clandestine phenomenon in Iran, but punishable as well (3). These are the main reasons for the very limited data available on this population (4). In 2013, it was estimated that there were about 30,000 to 60,000 females in Iran involved in FSW (4). The prevalence of HIV infection among them was about 4.5%. Of course, it should be mentioned that due to the clandestine nature of this group in Iran, this is an underestimated figure (5). The majority of FSWs do not use condoms consistently (6). In the recent years, the number of females with HIV, which were infected through sexual intercourse, is increasing (5).

Studies suggest that there are several factors in the creation of different types of FSWs, including economic, cultural, and social status (7). In order to earn money, FSWs carry out the activity in two forms: regularly (those who receive money in exchange for sexual intercourse and this is

their only source of income) or on a casual basis (males or females who have occasional sex for money, and they have another job with insufficient income) (8). Data published in Iran exclusively related to FSW have been published in the recent years (3). Therefore, some types of FSW place females at risk of obtaining STIs /HIV or expose them to rape, violence, etc. (9). Different studies have reported that FSWs' job status could affect their behaviours pertaining to the use of condoms, taking alcohol or ecstasy drugs before sexual contact, oral and anal sex, sexual violence, and multiplicity of sexual partners (10).

Studies have also noted that the partners of FSWs either don't use condoms or give less preference to using them. The HIV prevalence is associated with the use of condoms during the last sexual encounter with a regular partner (2, 6, 11).

The objectives of this study was to compare the use of condoms, consistency of the sexual partner, drug use before sex, FSW in team houses, and HIV prevalence amongst casual and regular sex workers.

2. Objectives

The Purpose of this study was comparing the high-risk behaviors between regular and casual sex workers.

3. Materials and Methods

3.1. Design and Settings

This cross-sectional study was conducted during year 2015 with females, who worked as 'FSWs' in one of the biggest cities in Northern Iran. The data was collected from the subjects, who referred to the behavioural disorder counselling centre (BDCC), the drop-in centres (DIC), and venues. For access to FSWs, three sampling methods were used including Convenience Sampling from the DIC/BDCC, Responding Driven Sampling, and Sampling from venues. During this study, skilled interviewers were employed with vast experience in providing services to FSWs at the centres.

3.2. Study Procedure

3.2.1. Participants

Females were invited to participate in this survey by explaining the objectives of the study. Of the 206 females, who volunteered to participate, 184 were eligible. The inclusion criteria included age of $18 \leq$ years. The participants had to have at least one experience of selling sex in the recent year. Informed written consent was obtained before the interviews and confidentiality was reassured by anonymous coding of each female. Women identified as a none FSW were excluded.

The HIV rapid test was carried out for the participants, who were willing to undergo the test. Moreover, after the interviews and the required tests were complete, the participants were informed about the test results, and they were referred to a specialist, if necessary.

3.2.2. Measures (Questionnaire)

The required data was collected via a standard questionnaire on behavioural surveillances for vulnerable females (12). Independent variables included age during the interview, age during first marriage, age during the first sexual contact experience, age during the first sex work experience, educational level, marital status, native status, occupation, having consistent sexual partners, work experience in a brothel, migration for sex work, using drugs before sexual contact, and using condoms.

3.3. Statistical Analysis

Descriptive statistics and frequency were calculated for all variables. In order to compare the 2 groups, statistical chi-square test and t-test were used. All statistical analyses were done by using the SPSS software and the level of error was $P < 0.05$.

3.4. Ethical Considerations

The ethical issues were considered regarding the confidentiality and anonymity of information. All participants provided an informed consent. The ethics committee of Iran University of Medical Sciences considered and passed this research proposal in January 2015, and the study's ethics code was 105/5225/2014.

4. Results

The average age of casual FSWs was 32.53 ± 7.39 years and that of regular FSWs was 30.27 ± 8.25 years, and this difference was significant (P value < 0.05). The average age at first marriage among casual FSWs was 19.37 ± 12.79 years and for regular FSWs, this was 20.52 ± 15.34 years. The average age during first sex among casual FSWs was 20.42 ± 11.04 years and for regular FSWs, this was 23.35 ± 18.44 years. The average age at first sex work of casual FSWs was 29.98 ± 13.94 years and for regular FSWs, this was 30.14 ± 19.32 years. The two groups (regular and casual FSWs) had an equal number of native cases and migrants. Native FSWs were mainly involved in casual FSW (58.2%), whereas the migrant females (53.4%) were involved in regular FSW. In terms of job or profession, most of the individuals with casual FSWs occupations had second level skills (13). Other demographic features are provided in Table 1.

Table 1. Demographic Characteristics of Casual and Regular Female Sex Workers^a

Demographic Characteristics	Total	Casual	Regular	P Value
Education (Latest level)				0.597
Illiterate or read and write	58 (31.7)	27 (46.6)	31 (53.4)	
primary	12 (6.6)	6 (50)	6 (50)	
Secondary	23 (12.6)	13 (56.5)	10 (43.5)	
High school	57 (31.1)	32 (56.1)	25 (43.9)	
Academic	33 (18)	21 (63.6)	12 (36.4)	
Marital status				0.809
Single	41 (22.4)	21 (51.2)	20 (48.8)	
Married	44 (24)	24 (54.5)	20 (45.5)	
Divorced	56 (30.6)	33 (58.9)	23 (41.1)	
Temporary marriage	27 (14.8)	13 (48.1)	14 (51.9)	
Widow	14 (7.7)	8 (57.1)	6 (42.9)	
Native status				0.175
Native	110 (60.1)	64 (58.2)	46 (41.8)	
Expatriates	73 (39.9)	34 (46.6)	39 (53.4)	
Occupation				0.0001
First level skills ^b	114 (62.3)	42 (36.8)	72 (63.2)	
The second level skills ^c	69 (37.7)	57 (82.6)	12 (17.4)	
Length of sex work, y				0.08
1 ≥	40 (22)	17 (42.5)	23 (57.5)	
1 <	142 (78)	82 (57.7)	60 (42.3)	
Latest sex work, mo				0.21
1 ≥	129 (70.5)	66 (51.2)	63 (48.8)	
1 <	54 (29.5)	33 (61.1)	21 (38.9)	

^aValues are expressed as No. (%).^bWorker - working without income.^cEmployee - self-employed - hairdresser - Tailor.

The average age of the participants during their first sexual experience was 18.7 ± 4.7 years, yet there was no significant difference between them. The average age at first sex work experience was 26.2 ± 6.7 years. Comparatively, there was a significant relationship between these 2 variables (P value < 0.05). Other features of high-risk behaviours are illustrated in [Table 2](#).

5. Discussion

The average age of casual FSWs was older than that of regular FSWs, and this difference was significant between them. Moreover, among regular FSWs, the age during their first sex work experience was younger than that for casual FSWs, and this difference was statistically significant

as well. Since there was no comparative study in the information banks regarding this issue, it is probable that the young ages of the first sexual relation and sex work can be indicative of these people's dealing with illegal sexual relations at a younger age and its non-correspondence with the norms of the Iranian society. Therefore, these conditions could lead to disorders in the family system, loneliness and separation from the society, being a social outcast, and finally end in sex work (14). However, the females, who started sexual relations and work from an early age are less educated about AIDS prevention; subsequently, they rarely refer to the VCT/DIC in this regard, and they are more exposed to HIV/AIDS (9, 15).

Most cases of the current study were divorced. However, there was no significant difference between them,

Table 2. High Risk Sexual Characteristics^a

High-Risk Behaviors	Total	Casual	Regular	P Value
Constant partner or client				0.651
Yes	157 (85.8)	86 (54.8)	71 (45.2)	
No	26 (14.2)	13 (50)	13 (50)	
Working experience in brothels (past year)				0.008
Yes	60 (32.8)	24 (40)	36 (60)	
No	123 (67.2)	75 (61)	48 (39)	
Drug use before sex (past year)				0.75
Consistent	28 (38.4)	12 (42.9)	16 (57.1)	
Sometimes	45 (61.6)	21 (46.7)	24 (53.3)	
Drug abuse				
Opium	64 (37.4)	26 (40.6)	38 (59.4)	0.005
Hashish	17 (9.9)	6 (35.3)	11 (64.7)	0.09
Heroin	35 (20.5)	12 (34.3)	23 (65.7)	0.007
Glass	55 (32.2)	24 (43.6)	31 (56.4)	0.048
Condom use (lifetime)				0.036
Yes	153 (83.6)	88 (57.5)	65 (42.5)	
No	30 (16.4)	11 (36.7)	19 (63.3)	
Condom use (Latest sex)				0.55
Yes	78 (43.3)	44 (56.4)	34 (43.6)	
No	102 (56.7)	53 (52)	49 (48)	
Condom use (last year)				0.94
consistent	66 (42.3)	37 (56.1)	29 (43.9)	
Sometimes	90 (57.7)	51 (56.7)	39 (43.3)	
Agree to take HIV testing				0.09
Yes	133 (72.7)	77 (57.9)	56 (42.1)	
No	50 (27.3)	22 (44)	28 (56)	
HIV test results				-
Positive	2 (1.5)	1 (50)	1 (50)	
Negative	131 (98.5)	76 (58)	55 (42)	

^aValues are expressed as No. (%).

and this finding matches the results of some other studies (16, 17). This issue is representative of the fact that economical and welfare support are challenged after marital separation. Furthermore, appropriate activities to support female-headed households are not provided (18).

More than one-third of regular FSWs had a very low educational level and about one-third of casual FSWs had a higher educational level. However, comparatively, there was no significant relationship between them and this issue was evident in some other studies as well (2, 19).

However, if educational status has an effect on these behaviours, high-risk areas and vulnerable people could be identified, and appropriate education could be provided for them. Thus damage due to sex could be decreased by providing courses on sexual health and prevention of STIs at academic levels (20).

More than half of the casual FSWs were engaged as hair-dressers and tailors, and comparatively, no significant difference was observed. However, some jobs could lead to high risk situations due to the type of people, who refer

to these businesses and their income level (21). Therefore, it could be concluded that by identifying jobs with high risks and holding training courses by guilds' institutions and health care centres, the knowledge level of these people could be improved.

Regular FSWs experience in team houses was greater than that of casual FSWs, and a significant difference was reported. Since these brothels are managed by sex brokers (22), and in majority of cases, they are not recommended to use condoms (23), there is a significant relationship between the inconsistent use of condoms and experience of working in brothels. This issue can be related to earning more money by giving various sexual services.

In general, use of condoms was better among casual FSWs than regular FSWs; however, a study conducted on casual FSWs reported that less than half of them had used a condom during their last sexual relationship (19). This issue could have various reasons, one could be the disagreement of the clients, which is confirmed by some other studies as well (24).

Having a fixed sexual partner is considered a risk factor (25). In this study, both groups had a relatively high rate of fixed sexual partner, yet no significant difference was observed between them. It could be inferred that there is a pseudo-confidence between the two sides in not using condoms; therefore, the risk of STIs will increase (2). The use of drugs, such as heroin and crystal, was significantly different between the 2 groups. This issue could be considered as an important risk factor that influences decision-making ability; consequently, high-risk of being affected by various diseases is inevitable, and this matter is confirmed by other studies (26).

The casual SFWs were more willing to take the HIV tests, while HIV prevalence was higher among regular FSWs. studies inferred that regular FSWs were more exposed to HIV infection, and the main reason was earning more money through sex. However, their unwillingness to take the required test was attributed to fear of being diagnosed with the disease, the stigma attached to them due to the disease, and their indifference regarding their health (9, 15).

Finally, given the changing pattern of AIDS transmission in Iran due to high-risk sexual behaviours, it is very essential to organize peer groups for outreach services, because by implementing this program, having access to FSWs could be more appropriate, and providing necessary services and taking tests could be done more easily in order to decrease the relevant damage in these groups (27).

Female sex worker's is a health concern in Iran, the most populous Persian Gulf country. Therefore, it is suggested to provide cognitive-behavioral therapy (CBT) to reduce high risk behaviors among FSW. Some studies have

approved the effectiveness of CBT in reducing high risk behaviors (28-30). Similar studies are suggested for Persian FSW.

5.1. Conclusion

In this study, the significance of the difference between regular and casual FSWs was somehow elaborated, and it was observed that regular FSWs are more exposed to high-risk behaviours than their casual counterparts. Moreover, the study revealed that some professions are more exposed to high-risk behaviours. Therefore, it is very essential to effectively intervene in these affairs and have a strategic identification and care program to curb high-risk behaviours in these groups.

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Footnotes

Authors' Contribution: Shahnaz Rimaz, Mehran Asadi-Ali Abadi, Mostafa Shokoohi and Reza Majdzadeh conceived and designed the study. Mehran Asadi-Ali Abadi, and Fereshteh Rostami-Maskopaei acquired the data. Jamileh Abolghasemi and Mehran Asadi-Ali Abadi performed the data analysis and interpretation. Mehran Asadi-Ali Abadi, Shahnaz Rimaz, Mostafa Shokoohi and Fereshteh Rostami-Maskopaei drafted the manuscript. Shahnaz Rimaz and Effat Merghati-Khoei revised it critically for important intellectual content. Jamileh Abolghasemi and Mehran Asadi-Ali Abadi performed the statistical analysis. Shahnaz Rimaz performed the administrative, technical, and material support. Shahnaz Rimaz and Mostafa Shokoohi supervised the study. All authors read and approved the final manuscript.

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