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Challenges in receiving HIV prevention services by female sex workers: a qualitative study

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Abstract

Introduction: Female sex workers (FSWs) play a considerable role in human immunodeficiency virus (HIV) prevalence. There is no comprehensive program to manage their health needs, especially HIV prevention. There are barriers and challenges, which sex workers face in accessing service provisions in healthcare centers, leading to services' under-utilization. This study was conducted to investigate these barriers and challenges that hinder the supportive and consultative care of female sex workers in Iran.

Material and methods: The present study was conducted in Tehran, the capital of Iran, using a phenomenological approach. Data were collected through in-depth semi-structured interviews among twenty-two female sex workers. Interviews were transcribed verbatim, and analyzed according to qualitative content analysis based on Colizzi's seven-stage method.

Results: Three main themes and seven sub-themes emerged from the collected data. Finding out about and attending healthcare center, perceived benefits and barriers, and challenges to using the services emerged as themes. Sub-themes included active search, referring by others, contraceptive measures, disease prevention services, economic aspects, systemic barriers, honor-related concerns, and stigmatization.

Conclusions: FSWs actively searched for healthcare centers or were referred to them due to increasing public awareness on HIV. Concerns regarding disease preventative measures and cost-effectiveness of such measures were some of the considerable perceived benefits of healthcare centers that encouraged female sex workers to attend these centers. Barriers included both systemic and honor-related concerns, and highlighted the importance of structural modification and staff training to create a safe space, and provide unbiased attitudes in the treatment of such patients.

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Introduction

For the past two decades, many countries throughout the world, including developing countries, continue to experience a steady increase in the number of individuals contracting and dealing with human immunodeficiency virus (HIV) [1, 2]. Female sex workers (FSWs) are among the most vulnerable groups who are at risk of HIV transmission [3, 4]. Given the challenges of the prevention of HIV transmission, it is important to focus on HIV risk behaviors among this high-risk population. Female sex workers have a considerable role in the prevalence of sexually transmitted diseases (STDs), such as HIV [5]. Since sex work exposes them to close sexual relationships with multiple sex partners from all walks of life, without any clear medical history with inconsistent condom use, and/or co-infection with other sexually transmitted infections, this kind of work can rapidly increase the spread rate of HIV [6].

According to the World Health Organization (WHO) report, about 74% of HIV diagnoses were due to sexual transmission [7]. In a systematic review study that investigated the prevalence of various diseases in low-and middle-income countries, HIV prevalence in female sex workers was estimated at 11.8% (95% CI: 11.6-12.0%). The calculated odds ratio for this group was 13.5 times higher (CI: 10.0-18.1%) compared with the general population [8]. Health organizations have taken various measures, including behavioral and biomedical procedures, to decrease the chance of HIV transmission [9, 10]. Although female sex workers are highly at risk of sexually transmitted disease, unwanted pregnancy, and rape [11-13], there are no organized health system plans to support FSWs [14-16]. When it comes to sharing their health concerns with healthcare providers, FSWs due to feeling of shame, refuse to disclose their problems. Additionally, healthcare providers are not sufficiently trained, and therefore, there is inadequate provision of health assessments designed to address the needs of sex workers [17].

There is no consistent estimate of the size of FSWs population in Iran. Based on the results of a study in 2017, the estimated size of FSWs population in Tehran was 690 persons (95% CI: 633-747%). Approximately, 89.43% of study subjects experienced sexual intercourse before the age of 20. The prevalence of human immunodeficiency virus infection among those subjects was 4.6% [18]. Results of a systematic review and meta-analysis showed that the pooled HIV prevalence was 2.23%, and the prevalence of other STIs were as high as 0.77% for hepatitis B, 6.18% for hepatitis C, 0.33% for syphilis, 1.47% for gonorrhea, 9.80% for chlamydia, and 6.18% for *Trichomonas vaginalis* [5]. Results of another study showed that the knowledge and preventive behaviors of female sex workers were low, and the intervention was effective in the increase of it [19].

In addition, there is no clear instruction provided to healthcare workers on how to serve sex workers best [8]. A body of literature emphasizes the importance of social networks in HIV transmission and prevention [20-22]. Health centers around the world are organized to provide services to FSWs regarding STDs, unwanted pregnancies, and sexual hygienic care. Nevertheless, all these services need to be systematically assessed in terms of their effectiveness, efficiency, usability, and stability. One of the best methods to evaluate the quality of these services is exploring the experience of individuals who have used these services, and to determine the barriers and challenges they have encountered. Therefore, the present study was conducted to investigate the experience of female sex workers receiving HIV support and counseling services from healthcare centers.

Material and methods

The present study was a qualitative study with a phenomenological approach, in which the experience of female sex workers in receiving support services and HIV prevention counseling in health centers was examined. Phenomenological design is useful, when the knowledge about the phenomenon under study is scant; therefore, this approach was applied to answer the research question. A descriptive phenomenological approach was chosen for the research because it focuses on describing the participant's experience of the phenomenon. The emphasis in this approach is that the experience is valuable as it is experienced by an individual's conscious and should be studied scientifically. Descriptive phenomenology seeks to define lived experiences rather than explain them. In-depth semi-structured interviews were used to obtain answers, and twenty-two women who were active sex workers were interviewed.

Healthcare centers that had HIV counseling services in Tehran were the research environment. Inclusion criteria were at least six months of working as a sex worker and receiving at least two sessions of HIV-related counseling. After obtaining all necessary permissions, the project partner who is a physician working at a center and communicated with subjects, identified suitable participants. The collaborating physician explained the research objectives to participants and, if they wished to participate in the study, they were referred to the lead researcher. After stating the goals and benefits of the project and explaining that not participating in the research would not create any obstacles to receiving further services, informed consent was provided to the interviewees by the main researcher. Interviews were conducted individually and in a place where the participant was comfortable. The interviews varied in length, and lasted between 38 and 63 minutes. Participants were informed that their interviews were recorded and analyzed, and that the data would be used without any indication of their names and information. The interviews were transcribed instantly, and to confirm the accuracy of the transcriptions compared with what they had answered, the interviews with all participants were reviewed. Their comments were included in the final version of the transcription, and they were checked and confirmed by all twenty-two participants. To achieve conformability of the data, four nursing PhDs with research experience in qualitative studies evaluated the interviews, primary coding, and categories. Raw data, codes, and categories were kept for audit purposes.

A purposeful sampling method was applied. Sampling was continued until data saturation was achieved. In this study, interviews were continued until the characteristics of all themes and their dimensions were determined. After 19 interviews, data saturation was achieved, and three additional interviews were conducted. The researcher first started the interviews with general questions to obtain an overall look. For example, "How did you find this center?"; "What services did you receive from this center?". Probing questions were used during the interviews. For example, when a participant told their colleagues about the center's recommendations, they were asked "How would you describe how the center works for you and your colleagues?".

Data analysis was performed with Colizzi's seven-stage method. The steps included: (1) careful study of each interview; (2) extracting important statements and sentences; (3) formulating the meanings of important statements; (4) repeating the first three steps and organizing the statements in thematic clusters; (5) comprehensive description of thematic clusters; (6) creating statements as a comparison of thematic clusters; and (7) returning to participants to clarify findings [23].

Ethical considerations

The code of ethics (IR.IUMS.REC 1395.95-03-121-29334) was obtained from the ethics committee of (Iran University of Medical Sciences). Researchers observed ethical considerations regarding confidentiality of sample information, obtaining permission from relevant authorities, obtaining written permission from the Research Ethics Committee, explaining the purpose and nature of the study to participants, obtaining informed written consent for participation of the subjects and recording of interviews, and all the participants were informed that they were free to withdraw from the study at any stage if they wished no longer to participate. The consent process was performed in Persian language. All consents were documented, and the participants were provided with a copy of the consent form.

Criteria introduced by Lincoln and Guba [16] were applied to increase consistency. In data collection section, the interview framework was designed using opinions of experts, then tested in the initial interviews. Opinions of peers and members of the research team were applied in the data collection and analysis phase. The interviewer first went through a training course on how to do an in-depth interview in order to better track and follow the topic. All useful data extracted from the text of interviews were provided to the interviewees for their comments to complete the information. In the analysis stage, opinions of all members of the research team were utilized. To increase transferability, all stages of the research and data analysis were fully explained [24].

Results

Twenty-two female sex workers participated in the present study. The demographic data of participants, including age, literacy status, work experience, and years of receiving healthcare services are presented in Table 1. Initially, 436 codes were extracted from the interviews. Table 2 represents the participants' experiences categorized into three main themes, including finding out about and attending a health center, perceived benefits, and barriers and challenges of using the services were categorized. Seven sub-themes, including active search, referral, contraceptive measures, disease prevention services, cost-effectiveness structural barriers, and honor-related barriers were classified.

Finding out about and attending a health center

Finding out about and attending a health center was the first emerged theme. This theme included two sub-themes: active search and referral. Active search means actively searching for a source of support, advice, and services. When sex workers became aware of their health problems caused by their job and the risks that they were possibly exposed to, they sought information and centers to use their services.

Participant No. 11: "I've heard on TV that there was a disease called AIDS transmitted through sexual relationships, and then I found out what it was, and I asked other women I knew."

Participant No. 14: "There were some awareness seminars and posters in the street. I was also worried that I might get infected, so I came here."

The referral was the second sub-theme that showed how the subjects found a healthcare center. Referrals by friends, companions, people with the same job, and doctors were some of the ways that introduced them to health centers.

Participant No. 8: "The woman who introduced us was very insistent that we must come here and get tested regularly. Previously, she came here to get condoms for all of us, but now it has become a little harder for her, so I come here personally."

Participant No. 6: "I came here with a friend, she does not come here anymore, but I continued to come regularly for a check-up".

Perceived benefits

Perceived benefits were the second main theme of the present study. The three main benefits included free contraceptive devices and services, disease prevention services, and cost-effectiveness.

Free contraceptive devices and services were receiving free condoms, reproductive health education, and diagnostic tests related to women's health. Women came to the center because they receive these services easily, free of charge, and without negative judgment. However, at first, they described their presence as hard and stressful.

Participant No. 16: "Tests like Pap smear and AIDS are very expensive out there, and they do them for free at the center."

Table 1. Demographic characteristics of the participants

Participant's number	Age (years)	Education level	Marital status	Sexual work experience	Years of receiving health services
1	32	Diploma	Divorced	3	1 year
2	25	Diploma	Divorced	1	3 months
3	21	Elementary	Divorced	2	6 months
4	26	Elementary	Divorced	4	2 years
5	22	Diploma	Single	2	1 year
6	35	Elementary	Divorced	8	3 years
7	20	Elementary	Single	2	3 months
8	26	Associate degree	Divorced	2	1 year
9	22	Elementary	Single	3	1 year
10	19	Elementary	Divorced	1	3 months
11	25	Associate degree	Single	3	2 years
12	33	Diploma	Divorced	12	2 years
13	30	Elementary	Divorced	6	1 year
14	20	University student	Single	1	6 months
15	21	University student	Single	2	9 months
16	27	Bachelor's degree	Single	3	2 years
17	26	Bachelor's degree	Divorced	1	6 months
18	45	Elementary	Divorced	12	6 months
19	48	Elementary	Divorced	6	Never used
20	22	Elementary	Divorced	2	Never used
21	25	Diploma	Single	3	Never used
22	28	Bachelor's degree	Divorced	4	2 years

Participant No. 9: "I come more for condoms, because it is very expensive outside, and if we do not have them, there are still many people who reject us without condoms."

The second perceived benefit was receiving STDs' prevention services. Performing diagnostic tests, referral in case of disease, periodic examinations, and access to a physician were among those perceived benefits.

Participant No. 16: "I also buy condoms separately, but the tests they have here are not out there. Coming here reminds me to be more careful."

Cost-effectiveness of the center's services was perceived as a third benefit. Receiving free condoms, free diagnostic tests, doctor referrals, free services, and access to free and inexpensive diagnostic and treatment facilities were among the perceived benefits of using the center's services.

Participant No. 10: "The AIDS test is free here, and after that, they give us condoms. It all costs a lot outside."

Barriers and challenges to using the service

Barriers and challenges of using services were the third main theme of the present study. This theme had two main sub-themes, including systemic barriers and honor-related barriers. Small number of centers, lack of information about the existence of centers, lack of constant access to services, non-availability of centers during holidays, and the fact that a center was a part of broader health center and their lack of independence from the broader center was among the most important aspects relating to barriers and challenges. Therefore, although participants acknowledged that the services provided were beneficial, in terms of timing in particular, and 'where' these clinics were situated geographically, the lack of privacy relating to these clinics' geographic location was among factors noted as barriers.

Participant No. 16: "During (the) holidays, when all centers are closed, we had to work and services are out of reach as it happened to me; I had an emergency to take a test or take medicine, but the center was closed."

Participant No. 4: "Whenever I want to come here, I have to make a big plan to come and go. For example, to get a condom, if I cannot come, or if (my condom supply) has been finished (and the center is closed), I have to buy it by myself or have sex without a condom."

Participant No. 9: "Our work time is completely different from health centers. You know, we usually work at night and sometimes we do not sleep at all till early morning. That is why the majority of mornings when health centers are open,

Table 2. Codes, sub-categories, and categories of the interviews

Themes	Sub-themes	Codes
Finding and attending health centers	Active search	Searching for information Accidentally finding information Receiving information through social media Searching for health centers Knowledge about high prevalence of HIV through co-workers
	Referring by others	Referred to health center by friends Referred to health service by a physician Accompanied by friends
Perceived benefits	Contraceptive measures	Providing condoms Educational programs Diagnostic tests Education about contraceptive
	Disease prevention services	Diagnostic tests Referral to hospital Access to gynecologists Routine health assessment
	Economic aspect	Free condom Free diagnostic tests Free health services Free doctor visits
Barriers and challenges to using services	Systemic barriers	Insufficient number of centers Unawareness of centers' availability Closure of centers during holidays Lack of independence centers
	Honor-related concerns and stigmatization	Fear of being judged Bad judgment of center's staff Bad treatment of center's staff Depression Fear of exposure in public

we are sleeping and miss the opportunity to use the provided services."

Honor-related barriers and fear of stigmatization were the second most important sub-theme of barriers and challenges. Fear of being judged negatively by center employees, depression and lack of energy, and attempt to hide from society were some of the obstacles and challenges in this category. Honor-related barriers were related to reputation and credit. The participants experienced a fear about their reputation and attitude of healthcare providers regarding their profession and reputation. Sex work is illegal and against Islamic and cultural values of Iranian society, therefore, our participants had problem to be known as bad people who did not commit to social values.

Participant No. 19: "I did want to come here, but my mother made me come. You know, I am wearing Hijab and I am ashamed. Because I am wearing hijab and it is my job, they say it is unlike a hijab girl and I am afraid of this judgment."

Participant No. 21: "I am depressed and tired. I do not want to go out at all."

Participant No. 17: "There was a place where the staff's attitude was very bad. She acted as if I had committed a crime. I did not go there anymore. It is not fair at all. They should understand, we do this job to afford our living costs."

Participant No. 6: "Some of these centers are also mixed with a large health center. It is very crowded. Although our consulting room is separate, well, it is kind of difficult to be exposed in public areas."

Participant No. 6's comment links to the need of sex workers to hide their profession, and their need for privacy. There is a strong desire not wanting to be publicly exposed when they seek testing and counseling, and this connects to the afore-mentioned structural issues in terms of where the clinics are located geographically, and if they are part of health care centers and not a separate clinic.

Discussion

Globally, particularly in developing countries, female sex workers are at an extraordinarily high-risk of contracting HIV. This study aimed to investigate the experience of FSWs in receiving support services and HIV prevention counseling. The results showed that the challenges and barriers to using the services of these centers were in two main categories, including structural barriers and challenges related to perceived stigma. Although we did not find a similar study in this field in Iran with the same purpose, other studies done in Iran have shown that there is deep fear and social stigma attached to being a sex worker, and being identified as HIV-positive person [25].

Sex work is illegal in Iran, and sex workers are subject to severe punishments if they are caught, and convicted of sex work-related criminal activity. Social and religious norms, taboos, and laws against any form of extra-marital sex make the collection of such data extremely difficult, and as such, sex workers hide the work that they do as much as is possible, and are reluctant to seek out testing and counseling due to fear of being identified, socially ostracized, and criminally charged [26]. Stigma associated with being HIV-positive in Iran is also extremely high, and is properly expressed in Kharmouzin *et al.* work entitled "I Am Dead to Them: HIV-related Stigma Experienced by People Living with HIV in Kerman, Iran". The authors of this study noted that participants in their study who were HIV-positive faced extremely high levels of stigmatization, they were ostracized from family and community and even healthcare providers to the point that they would rather hide their status to preserve 'face", and their honor and dignity [26]. In another study, sex workers stated that they would rather not know their status, and therefore not bother of being tested. Not knowing their status, that is 'remaining in the dark', enables them to avoid ever having to confront the emotional outcomes for themselves of knowing that they are HIV-positive, along with social stigmatization they would face if their family or community find out they are HIV-positive, and association with engaged in activities, such as sex work, which is regarded as completely taboo and illegal [27]. As a consequence, insufficient research is available on this population of workers, and their experience with HIV testing and counseling.

Little research can be found on the topic, indicating that the results of the present study are consistent with results of previous international research in this field. It is important to note that cultural considerations are evident in both structural and stigma-related fields.

In a study conducted by Kerrigan, the experience of female sex workers receiving support services during pregnancy in Tanzania was assessed. Pregnancy counseling was important in this group, because Tanzania has a high prevalence of HIV and female sex workers are at high-risk. 30 interviews and 3 group discussions were conducted. Many women used health services, but did not disclose anything about their work. The main challenges were that unmarried persons or widowers were not qualified to receive any services. Failure to receive healthcare until delivery was experienced by some participants. Additionally, difficulties in receiving support and counseling services exposed women and their children to HIV and other sexually transmitted diseases were observed [28].

Pinto *et al.* conducted a study that examined the challenges and barriers experienced by female sex workers in receiving HIV support and counseling services in Canada. A qualitative descriptive study was conducted, in which in-depth semi-structured interviews were conducted among seven female sex workers. The results showed that secrecy due to stigma and shame of their profession, limited resources and expertise in this field as well as lack of mobile testing services were the barriers to using support and counseling services [29]. HIV-related stigma and prostitution are important factors in not using support and counseling services. The results of a survey among 139 female sex workers in Russia showed that HIV-related stigma was negatively associated with diagnostic testing. Marginalized and at-risk individuals need to be provided with specific strategies, and identifying HIV-related stigma factors in receiving support and counseling services should be considered [30].

Topics related to reputation and honor were found to be related to not adherence to receive HIV-related services in our study. Studies have shown that stigma and reputation-related issues reduce health-seeking behaviors in people at risk of HIV. The term 'culture of honor' was first introduced by Nisbett and Cohen [31], and showed a relationship between honor-related issues with higher rate of violence in the South of United States compared with the Northern parts. The results of new studies showed that there is a relationship between culture of honor with higher levels of intimate partner's violence, more school shootings, and not to seek mental healthcare [32, 33].

In 2016, Nakanwagi *et al.* conducted a qualitative study to assess the facilitators and barriers to receiving HIV care among female sex workers receiving HIV testing services in Uganda. In this study, HIV-positive women, healthcare providers, and peer educators were interviewed. Data were qualitatively and thematically analyzed. The results showed that good quality of service and announcement of test results on the same day, HIV education, social support, the need to stay healthy, and having alternative sources of income had all a positive effect on seeking out and receiving counseling and HIV testing services. The barriers included perceived stigma, fear of being seen in an HIV clinic, myths about HIV treatment, lack of time to visit, and financial constraints. The results of that study showed that HIV service delivery programs for female sex workers should concentrate on barriers that stem from stigma and misinformation [14].

While the results of the present study indicated the barriers of using HIV-related service seeking among FSWs, there are some limitation. First, we did not have enough native studies to compare our results. However, our results can be a base for future studies and policy-making. Second, due to the nature of qualitative inquiry, the generalizability of our results is low. We attempted to increase the transferability of our study by thoroughly explaining the methods and results.

Conclusions

Based on the results of the present study, coming to know about healthcare centers is shown as referral or active search. The role of institutions in charge of communication of information regarding services is highlighted by the fact that they can encourage potential service beneficiaries to actively seek information and receive counseling and support services by active and consistent informing. Perceived benefits include services related to women's health, disease prevention services, and cost-effectiveness seem to help increase the referral of this high-risk group. Obstacles are classified into two categories: systemic and stigma-related. Work of a health center is similar to government offices, while the work of this group does not fit the administrative model. Restructuring these service in health centers and using new methods of providing services as well as using peers are recommended. Training programs for healthcare providers and increasing public awareness in order to create an unprejudiced community to reduce barriers related to stigma can also facilitate providing required services to this vulnerable risk group.

Conflict of interest

The authors declare no conflict of interest.

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