Barriers to Free Antiretroviral Treatment Access for Female Sex Workers in Chennai, India

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Abstract

India's National AIDS Control Organization (NACO) provides free first-line antiretroviral treatment (ART) at government centers for people living with HIV. To assist in developing policies and programs to ensure equity in ART access, we explored barriers to ART access among female sex workers (FSWs) living with HIV in Chennai. Between August and November 2007, we conducted three focus group discussions and two key informant interviews. Data were explored using framework analysis to identify categories and derive themes. We found interrelated barriers at the family/social, health care system/programmatic, and individual levels. Major barriers included fear of adverse consequences of disclosure of HIV status due to stigma and discrimination associated with HIV and sex work, lack of family support, negative experiences with health care providers, lack of adequate counseling services at government centers and by outreach workers employed by nongovernmental organizations (NGOs), perceived biased treatment of FSWs who are not referred by NGOs, lack of adequate knowledge about ART, and fatalism. Barriers can be addressed by: creating effective measures to reduce stigma associated with HIV/AIDS and sex work at the familial, societal, and health care system levels; incorporating information about ART into targeted interventions among FSWs; training counselors at government hospitals and NGO outreach workers on treatment issues; improving infrastructure and staffing levels at government centers to allow adequate time and privacy for counseling; and implementing government mass media campaigns on ART availability. Finally, it is crucial that NACO begin monitoring ART coverage of FSWs and other marginalized populations to ensure equitable ART access.

Introduction

A VAILABILITY OF ANTIRETROVIRAL TREATMENT (ART) has significantly improved the prognosis of people living with HIV (PLHIV) by controlling viral replication, restoring immune system function, extending life, and thus enhancing the quality of life of PLHIV.

In 2004, the government of India began providing free first-line ART in government ART centers. According to India's National AIDS Control Organisation (NACO), "Under NACP-III [third phase of the National AIDS Control Programme], first-line ART drugs will be provided to all those who need it." Furthermore, NACO maintains that public health facilities need to ensure that ART is provided to PLHIV, including female sex workers (FSWs), referred from targeted interventions.¹

NACO estimated that approximately 25% of the 2.38 million adults living with HIV in India in 2006 required ART and

that only approximately 20% of those who required ART were receiving it.² Clearly, a major challenge for government ART centers is to expand access to free ART.

FSWs have been recognized by NACO as one of three "core high-risk groups" that are worst affected by the HIV epidemic in India.¹ The estimated size of the FSW population in India is 0.8 to 1.24 million.¹ HIV prevalence among FSWs is estimated to vary from less than 1% in some districts of Kerala and Tamil Nadu to more than 30% in some districts of Maharashtra and Karnataka.³

There is no published data from NACO about the number of FSWs receiving ART through its national program. However, positive people networks and community organizations working with FSWs report that FSWs living with HIV have limited access to free first-line ART from government ART centers.⁴⁻⁸ One physician, speaking in reference to a government ART center where he worked in Chennai, is quoted as

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having said: "Where are the sex workers? We only see clients of sex workers."⁸

Chennai has an FSW population of approximately 19,000,⁹ with an estimated HIV prevalence of 3.6%.¹⁰ To address inequities in ART access for marginalized groups such as FSWs, it is crucial to identify their different needs and constraints when accessing ART and to design interventions accordingly.^{11,12}

This study aimed to identify and understand barriers faced by FSWs living with HIV in Chennai in accessing free ART provided by government ART centers. Identifying and understanding these barriers will support the development of effective interventions to enhance access to ART among FSWs living with HIV.

Methods

In this article, ART access refers to access to free first-line ART regimens available in government ART centers supported by NACO. The three government ART centers that provide ART to adults in Chennai are located within the major government hospitals.

Between August and November 2007, we conducted three focus group discussions (FGDs) and two key informant interviews among FSWs recruited through nongovernmental organizations (NGOs) that provide services to FSWs in Chennai. FGD participants were recruited using purposive sampling to reflect diversity in terms of area of residence, living situation (with family members or alone) and duration of contact with the NGO. Participants were also selected based on ability to articulate their own and their peers' perspectives in relation to accessing free ART from government ART centers. Sex work was reported as the main occupation by all participants.

One key informant was an FSW community leader of a community-based organization (CBO) and the other key informant was a former FSW with several years of experience in providing peer counseling to FSWs. Key informant interviews focused on exploring perspectives and experiences in relation to free ART access for FSWs as well as eliciting insights on how to remove barriers to ART access.

All FGDs and key informant interviews were conducted in a private room at agencies that work with FSWs. Written informed consent was obtained from all participants, including consent for audio-taping of the FGD. The study received approval from the ethics review committee constituted by the Indian Network for People Living with HIV (INP+).

FGDs and key informant interviews were conducted using a semistructured in-depth interview guide in Tamil with scripted probes. Questions were modified or added over the course of the study in an iterative process to explore and reflect on emerging findings, a technique called progressive focusing.¹³ FGD facilitators and interviewers were native Tamil language speakers who received extensive training in interviewing and research ethics. All FGDs, key informant interviews, and communications with participants were conducted in Tamil.

The duration of FGDs ranged from 60 to 90 minutes; key informant interviews lasted approximately 60 minutes. An honorarium of 250 Indian rupees was given to FGD participants. Key informants did not receive an honorarium. Interviews were tape-recorded, transcribed verbatim in Tamil, and translated into English for data analysis.

Data analysis

FGD and interview data were explored using framework analysis to identify categories and derive themes.¹⁴ We developed a hierarchical thematic framework that we used to classify and organize data according to key themes, concepts and emergent categories. Framework analysis is particularly appropriate for applied qualitative research when a study is oriented towards policy outcomes.^{15,16} Based on Aday and Andersen's¹⁷ framework of access to health services and our previous research experience in studying barriers to HIV testing¹⁸ and sexual health services,¹⁹ we hypothesized that barriers to ART access might occur at several levels: family/social, health care system/programmatic, and individual. Our aim was to identify themes that could elucidate factors that influence FSWs' access to free ART from government health care centers.

Using the framework approach, we devised an *a priori* coding scheme to identify themes at different levels (family/social, health care system/programmatic, individual). Three data analysts coded one FGD and one key informant interview together and then coded additional transcripts separately once it was clear that the coding system was being used consistently. Any uncertainties in coding were discussed with at least one other member of the research team to ensure consistency; revisions to the coding scheme were made as necessary. We used open coding and *in vivo* coding to derive new codes that emerged in addition to the predetermined coding categories and a constant comparative method within and across cases to test provisional hypotheses.^{20,21} Theoretical coding was undertaken to identify higher level codes and relationships among categories.^{20,22} In presenting the themes and subthemes, we incorporated both commonalities and differences in viewpoints and experiences that emerged, along with illustrative quotations.

We used peer debriefing and member checking to enhance validity of the findings.²³ Peer debriefing was conducted by discussing interpretations of the data with community experts on FSWs. Member checking (respondent validation) was implemented by reengaging key informants to discuss and clarify their interview data and reflect on emerging findings. Data source triangulation between participants and key informant service providers increase the trustworthiness of the findings.²³

Results

FGD participants ($n = 19$) ranged in age from 21 to 48 years (mean = 33 years). Sixty-three percent ($n = 12$) of participants did not complete high school; 42% ($n = 8$) were currently married and living with their spouse; and 21% ($n = 4$) were on ART.

NACO classifies FSWs into six typologies: street-based, brothel-based, lodge (small hotel)-based, *dhaba* (roadside resting places for truckers and other long-distance motorists)-based, home-based (secret), and highway-based.²⁴ NACO points out that these categories are often overlapping and fluid. In the current investigation, FGD participants were an overlapping mix of home-based (secret) and street-based FSWs. According to NACO, the former usually operate from their homes, contacting their clients on the phone, through word of mouth, or through middlemen. Generally they are not known to be working as FSWs within their neighboring

area and may have an entirely different “public” identity, e.g., housewife, student. Street-based FSWs, as defined by NACO, solicit clients on the street or in public places such as parks, railway stations, bus stands, markets, and cinema halls. We present this information to characterize our FGD participants with respect to standard FSW typologies used in India, not to define analytic categories for this investigation.

We grouped the findings under three major subheadings: family/social barriers, health care system/programmatic barriers, and individual level barriers. However, we found substantial interlinkages among the barriers at all levels.

Family/social barriers

Fear of adverse consequences as a result of disclosure of HIV-positive status is a major barrier that prevents FSWs from accessing proper health care, including free ART. Underlying this fear are the family/social level barriers of stigma and discrimination related to HIV and sex work.

Lack of family support. FGD participants and key informants stated that FSWs found to be HIV-positive face major repercussions if their diagnosis, which might also suggest that they became infected through sex work, becomes known to their family: domestic violence from the husband; eviction from the home by the husband and in-laws; and rejection by family members, including their own children. To avoid these negative consequences, most HIV-positive FSWs do not reveal their profession or HIV-positive status to their family members.

In the absence of symptoms of HIV illness, the fear of being exposed as HIV-positive and as an FSW to family members prevents many FSWs from seeking ART. As a FGD participant said, “We [peers] indirectly tell them [other FSWs] to take ART but they are afraid of what if their family comes to know [about their HIV-positive status] and hesitate to take it. If the family comes to know about that then for sure there will be problems. They are not taking [ART] for these reasons.” Another FGD participant said, “Since my [family] is not aware of my activities [sex work], taking this medicine will be a big problem for me.”

Furthermore, some FSWs feel they need family support for ART adherence. According to one participant, “I need to take this medicine on time but no one [in the family] will take care of me. It will be difficult to take this tablet without their support.” This places FSWs in a serious dilemma: they want family support for adherence but fear that disclosure of their HIV status would undermine family support.

Many FSW participants were married women who, like other married women in India, take care of all the household chores, their husband, and their children, but do not receive family support to take care of themselves.²⁵ As a participant said, “I have to do all the housework to send my children [to school] and husband [to work]. By that time, it would become around 10:00 to 1:30 [AM] and then once back in the evening I need to work until late at night. Where will I find time to take the medicine?”

Unmet basic needs. Most FGD participants reported that they engage in sex work in an attempt to meet their day-to-day needs and support their families. Often they lack basic needs for survival such as sufficient food for themselves and

their family. This lack of adequate food, in the face of counselors’ emphasis on the importance of proper nutrition for PLHIV on ART, makes some FSWs reluctant to initiate ART. As expressed by a key informant (peer counselor), “If they have to take ART, then they need to have adequate strength [English term] . . . Since some people don’t have [regular access to] food, they are not taking that medicine. Some people say, ‘If I have to take ART, then I have to take proper food. It is very difficult for us to get proper food. So, I am not taking that [ART].’”

Loss of wages while visiting an ART center also discourages such visits. One FGD participant said, “Without income what can we do? We feel like, ‘Should we go for treatment?’ . . . We will not earn anything when we go to hospitals.”

Societal-level stigma and discrimination. FGD participants noted that PLHIV may be ostracized because they are viewed to be “immoral” or “bad in character,” and that FSWs are denied alternative work. Some FSWs living with HIV do not seek health care because they fear being isolated. According to one participant, “[Some FSWs] think that, ‘If other people come to know that we are HIV-positive then they might isolate us from the society’ and they are reluctant to visit the hospital.” Another participant related how her friend was disowned by her family and isolated by society after her HIV-positive status and profession were revealed to them: “After she had been to the ART center, her father-in-law went and inquired. Confidentiality should have been maintained, but the lady counselor over there told everything to him. This family is a high-class family. Now, they have isolated her—without house and job. The entire area has isolated her. She is not even able to get a job of carrying sand [daily-wage labor]. Wherever she goes, the father-in-law comes and tells about her [positive status]. When this is the situation, taking ART is a big problem.” In addition to illustrating societal-level stigma and discrimination, this anecdote illustrates a health care system barrier with respect to the breach of confidentiality by the counselor.

Organization of sex work. Sex work places various demands on women that may impact their ability to access ART and to adhere to ART regimens. ART, if initiated, needs to be taken regularly, even during sex work hours. Some FSWs do not initiate ART because taking ART during sex work hours would expose that they are “diseased,” with possible loss of clients and income. As a FGD participant mentioned, “Are we standing there [sex work site] to earn money or to come back empty-handed? As such there is a demand for getting ‘customers’ [English term]. And if we are known to be positive—that’s all—we have to close our shops [stop doing sex work]. We don’t want to be seen having those pills.”

Another participant said, “Most sex workers on ART have this fear like, ‘What will happen? For 4 days in a week we are going for business [sex work]. These 4 days we cannot take this [ART]. So for those 4 days, tablets will be wasted and [can create] a lot of problems.’” Hearing about problems of taking ART in the “field” discourages other HIV-positive FSWs from initiating ART.

Some FGD participants feared that if it became known that they used ART (and consequently were HIV-positive) they would become isolated from their support circle of FSW friends and referral of clients from other FSWs would stop.

One FGD participant related, "If [they] come to know that I am like this [HIV-positive], my friends might think about me differently. Then, they will not even refer their clients to me. They don't invite me if there is some function." In addition, some participants stated that due to competition for clients, some FSWs disclose or threaten to disclose to clients the HIV status of their HIV-positive FSW colleagues.

Finally, some FSWs are concerned they would forget to take ART during sex work. A key informant (CBO leader) said, "We do not take ART while going to sex work. We will forget to take it. Due to this, most of us do not take [initiate] it."

Health care system/programmatic barriers

Negative experiences with health care providers. Prior negative experiences in the government health care system and having heard about other FSWs' negative experiences discourage some FSWs from attending ART centers. Some FGD participants pointed out the unfriendly attitude of staff in the government hospitals, who view FSWs as "promiscuous" and use insensitive language. As narrated by a FGD participant:

Honestly speaking, I don't have strength [English term] to go the hospitals or somewhere else. Fortunately, by God's grace there are NGOs to take care of us. In case of absence of [these NGOs], I will live simply as long as I can and die because I don't like going there [government hospital]. Once, they [staff in government hospital] shouted at a person: "Since you don't live with one person and go to many [persons], you get not only this [HIV infection] but also all [many diseases] together." If I am going to be in a condition to take tablets [ART], I will not go there because they denigrate us.

According to a key informant (peer counselor), "[Some FSWs] are already afraid that they might be seen by others when going to an ART center for the first time. They [health care providers] say, 'Do you have HIV? Don't sit here, go and sit there. Don't touch this, don't touch that'... they [FSWs] become scared. Mainly due to this, [some FSWs] say, 'I don't want any medicine' and run away."

Negative attitudes on the part of doctors may lead to substandard or biased treatment. According to one FGD participant, "[Some doctors say], 'You have gone [had sex] with many [men] and got the disease [HIV]. Even doing this much [providing treatment] is a big thing.' And it seems to me, given a choice, they would not like to treat us. It is as though 'Why should we [doctors] give treatment to people like you?'... They look at us with disrespect."

Lack of adequate counseling services at government centers and by NGO outreach workers. Key informants reported that FSW rights to privacy during counseling were not protected in some government hospitals. According to one key informant (peer counselor), "They [counselors] have learnt how to give counseling but they don't practice it properly. [Counseling] has to be given one-to-one in a separate room. There is nothing like that." Key informants believed lack of privacy was a systemic problem, stemming from inadequate infrastructure and high patient volume.

Key informants suggested that high patient load was also responsible for counselors providing only cursory information within the short time available for counseling each patient. A FGD participant complained about the lack of

detailed counseling regarding CD4 counts: "[The] counselor would say only, 'Your CD4 is low. Get the health tonic.' They are very slack and do not explain things in detail."

Posttest counseling for persons testing HIV-positive in government centers should include information about ART.²⁶ However, according to a key informant (peer counselor), FSWs are often counseled about ART in a way that prevents them from accepting the message:

Proper counseling is not given to them after knowing that [HIV status]. What they are doing in counseling is—they are simply threatening them. They are threatening like: "You have to take care of your health, you have to take tablets correctly, only then it is good for your health." They [FSWs] are afraid when they talk like this [in a harsh manner]. The person who is a counselor should speak politely.

Finally, HIV interventions conducted by NGO-employed outreach workers among FSWs mainly focus on HIV prevention education and condom promotion and distribution.²⁴ FGD participants complained that outreach workers—most of whom are FSWs themselves—do not provide detailed information about ART to their peers. A key informant (CBO leader) agreed: "Even though they [outreach workers/peer educators] have knowledge up to the level of saying 'Take ART when your CD4 becomes low,' they still require some more training."

Perceived biased treatment of FSWs who are not referred by NGOs. FGD participants related that people who come to ART centers accompanied by an NGO staff person or with a referral note from an NGO are registered immediately if medical eligibility is satisfied. Key informants explained that staff in ART centers tend to give priority to people referred by NGOs because NGOs have established good rapport with the government hospitals and because those referred by NGOs are usually followed up by NGO staff to ensure adherence. According to a key informant (CBO leader), "If we visit through NGOs, with staff or a peer educator and letter pad [referral note from NGOs], for sure they will get ART. It is very difficult to get ART without referral. They are saying, 'no medicine for you, go and come next week.'"

Similar concern was shared by a FGD participant: "If we go to the hospital, some will treat us well but some do not. It is good to get treated while a person from a [positive people] network sits nearby. Why it is?... If I don't know anyone there, they will not treat me well."

Practical difficulties in being hospitalized for observation during ART initiation. Some ART centers in Chennai recommend a 2-week hospital admission for PLHIV who are initiating ART to monitor for serious side effects (such as a life-threatening allergic reaction to nevirapine), which are more common during the first few weeks. Some FGD participants reported this admission to be a barrier to ART because they would not be able to explain a 2-week admission to their family members, who do not know their HIV-positive status, or because they would not be able to engage in sex work or other work to earn money during their hospital stay. Thus, some FSWs postpone initiating ART until they become symptomatic even though their current CD4 count may be less than 200 cells per microliter, which makes them eligible for ART initiation.¹ One FGD participant said, "If I have to be

started on ART, I need to get admitted in the hospital for 15 days. How can I do this when I have four children? My in-laws will question me about my health. I cannot say to them that my CD4 is low and leave my four kids and come [to the hospital]. They don't know that I am involved in this [sex] work and I am [HIV-] positive."

Individual level barriers

Lack of adequate knowledge about ART. Key informants and FGD participants reported that most FSWs had inadequate knowledge about ART, including benefits, side effects, and when to initiate therapy. PLHIV with CD4 counts less than 200 cells microliter are eligible for free ART from government centers.¹ But some HIV-positive FSWs are not even aware of their CD4 count. As expressed by a key informant (CBO leader): "If we ask what your CD4 count is, some [FSWs] will just say 'I don't know.'" Consequently, some FSWs who might have initiated ART had they known their CD4 count seek medical care only when they have a severe opportunistic infection, as shared by the other key informant (peer counselor): "Since they are fine, they don't think about this [ART]. Only when they become ill, they think about it."

Fear of eventual failure of first-line ART combined with a belief in potential cure by alternative medicines also precludes some FSWs from initiating free ART. According to a FGD participant, "Someone told me that first-line ART will work only for 2 years. After that there will be some side effects [referring to drug resistance]. Country medicines don't have such side-effects. We heard that diseases not cured by 'English' [allopathic] medicine can be cured by country medicines." These kinds of messages prompt some FSWs to reject allopathic medicine and to visit alternative medicine practitioners, the majority of whom have no medical qualifications. According to a key informant (peer counselor), "Some people say that this [HIV] will get cured by country medicines . . . Two or three members [FSWs] went to some hospital in [a place in Chennai] thinking that they can get cured."

Fatalism. FGD participants related that some FSWs are reluctant to initiate ART, in spite of the recommendation of peers and health care providers, because they believe ART only briefly extends life and they face premature death whether or not they take ART. These FSWs do not want to burden themselves by taking ART that requires medication adherence and monthly visits to an ART center and may result in unpleasant side effects. One participant said, "There are a lot of people affected by HIV/AIDS but when we tell the people, some accept while some say like, 'Whatever it is we are going to die anyway; till then let us enjoy and die' and refuse to accept." According to a key informant (CBO leader), "She [FSW] says, 'I am going to live for only a few days. Why do I need to take medicines for that? It can make my life miserable.'"

Alcohol consumption. Participants mentioned that patients who register for ART are strictly advised not to consume alcohol to facilitate adherence and to reduce side effects. Some FSWs are reluctant to initiate ART because they do not want to stop consuming alcohol, in part because it helps them to cope with the stresses of their work. According to a key informant (peer counselor), "While taking drinks and medicine together, it brings side effects. Yes, just for that [reason],

they don't start [taking ART]." The other key informant (CBO leader) reported that some FSWs, especially those who do not live with their family, consume alcohol because of the physical stress associated with sex work as well as the stress of "problem clients" who do not pay or who force them to have sex without condoms: "Some [FSWs] get this habit [drinking alcohol] when their 'customers' ask them to drink along with them . . . and don't use condoms . . . Some [FSWs] work a lot and thus get body pain."

Facilitators of ART access

Some FSWs who have understood the benefits of taking ART make their health a priority and initiate ART. One FGD participant said, "The fact that we can live well and healthy for many years if we take ART [facilitates] taking it." Another participant said: "[Some sex workers might say] 'we must take care of our health first, that is more important for us. Sex work is only next. No problem if we have no earnings for a week. Let us take care of our health.' Sometimes we think like this and go to the hospital [ART center]."

Some FSWs who take ART motivate others to take ART. A key informant (CBO leader) narrated how referrals among FSWs help in ART initiation: "While seeing [a FSW] in the field [sex work site], I refer her [to ART center]. She refers others. We both referred four other people."

FGD participants and key informants related that some FSWs, although skeptical about the benefits of ART, are motivated to take ART by their commitment to family members. One FGD participant said, "I have a 3-year-old baby. My husband is a drunkard. If not for me I have to live for my baby. That is why now I am on ART." A key informant (CBO leader) shared a similar view: "They [FSWs] are not going to achieve anything by taking ART. It is only for their family they take [ART]. Since they have to take care of their children they take [ART]."

Some FGD participants reported that they did receive adequate information about ART and its benefits during posttest HIV counseling, which motivated them to go to an ART center to check their eligibility for ART. According to one FGD participant, "... Depending on the duration of our infection they [counselors] also talk about ART and how to use it. Only because of this did we start to take this medicine."

Finally, NGOs help some FSWs initiate ART. As a participant said, "Only through NGOs did we come to know about this [ART]. Otherwise we do not speak or interact with others . . . Only after coming to NGOs, they ask us like, 'take this test, take that test, go here, go there.' We also go forward and stand in the queue [in government hospitals]. Is it not? . . . they counsel us like, 'don't be afraid, be bold.'"

Discussion

FSWs in Chennai face a variety of interrelated family/social, health care system/programmatic, and individual level barriers to accessing ART at free government ART centers. Most participants reported secretly entering into sex work to earn money to meet the basic needs of themselves and their families. Their strong motivation to keep their sex-worker and HIV status secret was intimately bound with stigma and discrimination, associated with both HIV/AIDS and sex work, within their families and the larger society. Adverse consequences of disclosure of their HIV-positive or sex-worker

status include rejection by family, domestic violence, eviction from home, social isolation, and loss of work/income. Participants were also reluctant to disclose their HIV status to their FSW colleagues for fear of losing client referrals or having their HIV status disclosed to clients by other FSWs. To the extent that FSWs feared that taking ART presented risk of disclosure, their fear of disclosure translated into fear of initiating ART. Consequently, FSWs tend to postpone initiating ART as long as possible, until they become symptomatic or seriously ill.

While most FSWs in Chennai may have adequate general knowledge about HIV,^{27,28} the current study indicated that they have limited knowledge about ART and treatment-related issues. Low levels of treatment knowledge was also identified in a multi-state study conducted among various subgroups of PLHIV including FSWs.²⁹ Systemic steps to improve FSWs' knowledge about ART include incorporating information about ART into targeted interventions among FSWs,^{30,31} which currently focus on HIV prevention education, and condom promotion and distribution, but not ART; training counselors at government hospitals and outreach workers on HIV treatment issues; improvement of infrastructure and staffing levels at government centers to allow adequate time and privacy for counseling; training of counselors to counter stigma associated with HIV/AIDS and sex work; and government mass media campaigns to publicize ART availability.³¹ Another systemic step that could help increase FSW access to ART would be flexibility around the 2-week hospital admission in some ART centers for PLHIV who are initiating ART.

Skepticism about allopathic medicine may motivate some to seek alternative medicines in place of ART. There is a common belief among wide segments of the Indian population that alternative medicines with virtually no side effects can cure chronic diseases that are not cured by allopathic medicine.^{32–34} Thus, education about ART should include accurate and unbiased information from trusted sources about what alternative medicines can and cannot do, particularly in the face of hyperbolic claims promoted by some alternative medicine providers in India who stand to profit from PLHIV.^{35,36} Recently, the Indian government announced a ban on advertisements that offer cures for HIV infection.³⁷

Staff and health care providers at government ART centers share with the broader society negative attitudes toward FSWs and conceptions about sexual morality that contribute to inadequate care for FSWs. Entrenched attitudes about sexuality and sex work are difficult to modify. While current training programs for health care providers and staff do include sections on stigma and discrimination, the adequacy of these modules has been recently questioned.³⁸ For example, there are no interactions with FSWs or people from other marginalized groups during these training programs.

Changing the negative attitudes of the general public in relation to sexuality will also be challenging. To start, public education campaigns to counter HIV/AIDS stigma and discrimination and to promote acceptance of PLHIV, including those from marginalized groups such as FSWs, need to be implemented.³⁹

Proper training for health care providers and staff is important, but not sufficient—the Indian health care system is faced with a crisis of ever increasing patient volume that has a strong tendency to overwhelm the available human resources

and infrastructure.⁴⁰ Thus, policymakers should ensure that trained human resources and infrastructure are appropriately proportionate to the client load in the public health systems in general and the government ART centers in particular.

We found that some FSWs are reluctant to initiate ART because they do not want to stop consuming alcohol, which is highly recommended at government ART centers for those taking ART. This points to the need for treatment of alcohol dependence among FSWs. Such treatment may need to address the specific context of sex work in which some women use alcohol to help them tolerate difficult or violent clients.

Few studies have focused on barriers to ART access among FSWs in India. However, one report showed that brothel-based FSWs living with HIV in Mumbai faced discrimination from health care providers, were evicted from brothels once their HIV-positive status was known, and faced delays in being referred to government hospitals for treatment when they were in custody in remand (detention) homes,⁴¹ which corroborates some of the barriers reported in the present study in Chennai.

Many of the barriers to ART access that we identified are not unique to FSWs. For example, a low level of knowledge about ART was observed in a general population (not FSWs) of HIV-infected patients receiving care in India.⁴² Loss of wages was identified as a barrier to HIV care in this same general population; similarly FSWs in the present study identified loss of wages as a barrier to visiting ART centers and to being hospitalized for observation during ART initiation. A study of barriers and facilitators to ART adherence (not access) among a general population of HIV-infected patients in Chennai identified nondisclosure of HIV status as a barrier to ART adherence and also identified family support as a facilitator of ART adherence, similar to our findings.⁴³

However, while all PLHIV in India, especially women, are subject to stigma and discrimination at the family, society, and health sector levels,⁴⁴ HIV-infected FSWs endure the additional burden of stigma and discrimination related to sex work. Disclosure of their HIV status is often synonymous with disclosure of engaging in sex work, which presents tremendous risks to their already tenuous family and social networks, as well as risks of violence. Most women infected in South India report a history of monogamy, with heterosexual sex with their husband as their only risk factor for HIV infection.⁴⁵ HIV-positive married FSWs are more likely than HIV-positive married women who are not FSWs to be blamed by their husband and in-laws for introducing HIV infection into the family and thereby may face increased risk of rejection, domestic violence, and loss of shelter and financial support. As a result, married FSWs face additional barriers to accessing ART.

In reference to ART, the World Health Organization (WHO) states that there is a need “to monitor the coverage of marginalized populations, such as intravenous drug users and sex workers”³¹ and recommends collecting disaggregated data from treatment sites on the number of people being treated from various segments of the population, including those from marginalized groups such as FSWs, men who have sex with men, and injecting drug users. It is crucial that NACO begin collecting these data, which is needed to monitor whether FSWs and members of other marginalized groups in India have equitable access to ART from government centers. Such data play an important role in substantiating disparities

in ART access, which in turn provides evidence to support systemic and policy level changes.

WHO also states that specialized interventions are necessary to meet the specific needs of members of marginalized groups living with HIV. For FSWs, these interventions should address legal status, social isolation, police abuse, and discrimination in health services.^{31,46} The Report of the Commission on AIDS in Asia (2008) specifically articulates the need to address legal barriers to effective HIV-related prevention and care services.³⁰ Legal barriers were not explicitly addressed by our FGD participants or key informants, although, according to NACO, the Immoral Trafficking (Prevention) Act 1956 continues to hamper implementation of targeted interventions services with sex workers.¹

This study had some limitations. Our intention was not to generalize the findings of this qualitative study across the various subpopulations of FSWs in Chennai. Because recruitment of the study participants was done through NGOs working with FSWs, the knowledge level of and community support for the study participants were likely relatively higher than for FSWs who are not associated with NGOs. This suggests that barriers to ART access may be even greater among FSWs in general. Furthermore, our study participants were home-based (secret) and street-based FSWs who do not work in brothels. The transferability of our findings to other urban settings in India with a predominance of brothel-based or other typologies of FSWs⁴⁷ may be limited. Future studies of ART access need to include other subgroups of FSWs in other localities with systematic comparisons by factors such as substance abuse and incarceration to support development of targeted interventions to address context-specific barriers.

In spite of these limitations, our study captured the perspectives and experiences of FSWs in Chennai with respect to accessing free ART at government centers, which will be useful for informing policies and programs to meet their needs. This should help NACO meet its commitment to ensure availability of ART to "all those who need it."

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