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Strategic Assessment to Define a Comprehensive Response to HIV in Iringa, Tanzania

Research brief

Female Sex Workers

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INTRODUCTION

The Iringa region of Tanzania has among the highest rates of HIV in the country at 9.1% prevalence in the general population (Tanzania Commission for AIDS [TACAIDS], 2013). The reasons behind this elevated HIV prevalence are not fully understood, and the response to HIV in Iringa has thus far been insufficient to match the need. The Iringa strategic assessment was designed to inform the development of comprehensive HIV prevention interventions that respond to key factors linked to HIV-related risk in Iringa, Tanzania. The strategic assessment synthesized existing data; conducted additional analyses of representative population-based data from the Tanzania HIV/AIDS and Malaria Indicator Survey; and conducted a large number of qualitative interviews and focus groups with key informants, service delivery providers and clients, and people at heightened risk of HIV in Iringa. Together, these findings provide a better understanding of the reasons behind the high HIV prevalence in the region and help to identify and tailor an appropriate set of interventions to address it. In this brief, we present findings related to female sex workers (FSW) and how to better address their heightened risk for HIV infection.

The Iringa Region of Tanzania has an HIV prevalence almost twize as high as the national average (9.1% vs. 5.1%, respectively), and women in Iringa have a significantly higher HIV prevalence than men (10.9% vs. 6.9%) (TACAIDS, 2013). The reasons for the higher prevalence in Iringa are unclear. It may be partly related to the numerous plantations in the region, which bring seasonal workers into Iringa, creating high levels of migration and mobility reported by men and women in Iringa in the past year (61.4%) (TACAIDS, 2008).The Tanzania-Zambia highway, which cuts through Iringa, may also play a role in facilitating HIV transmission. Both the plantation and highway transport workers create demand for sex work. The burden of HIV among FSW in Iringa is unknown, but the Government of Tanzania estimates the national HIV prevalence among FSW in towns and truck stops could be as high as 60%, and the prevalence among bar workers as somewhere between 32% and 50% (National AIDS Control Program, 2005). A 68% HIV prevalence and 10% incidence among bar and hotel workers was found in neighboring Mbeya Region, which also lies on the highway (Riedner et al., 2006). A recent meta-analysis of the burden of HIV among FSW in Sub-Saharan Africa found that even in places with generalized HIV epidemics, FSW face a disproportionately high risk for HIV infection (Baral et al., 2012). FSW had a pooled odds ratio (OR) of 12.4 for HIV risk compared to the general adult female population.

The unacceptably high level of HIV infection in FSW highlights the urgent need for comprehensive HIV intervention packages targeted specifically to this population. Interventions should be implemented to prevent HIV infection among FSW, treat those already infected, and prevent transmission to clients and partners of FSW. A systematic review of the effectiveness of various interventions for prevention of HIV and other sexually transmitted infections (STIs) among FSW found that a combination of sexual risk reduction, condom promotion, and improved access to STI treatment decreases both HIV and STI acquisition (Shahmanesh et al., 2008). A meta-analysis of peer education for HIV prevention, however, did not find a significant increase in condom use between sex workers and their casual partners (Medley et al., 2009). In addition, individual studies and systematic reviews have found that structural interventions such as community empowerment and supportive policy interventions among sex workers are also effective (Blankenship et al., 2008; Jana et al., 2004; Kerrigan et al., 2013; Kerrigan et al., 2008;

Lippman et al., 2010; Shahmanesh et al., 2008). Meta-analysis of community empowerment interventions for HIV prevention among sex workers in low- and middle-income countries showed positive effects on HIV infection (OR=0.84, 95 % confidence interval (CI): 0.709–0.988), gonorrhea (OR= 0.65, 95% CI: 0.47–0.90), and condom use with new clients (OR:=3.04, 95% CI: 1.29–7.17), regular clients (OR= 2.20, 95% CI: 1.41–3.42), and all clients (OR=5.87, 95% CI: 2.88–11.94), but no impact on syphilis, chlamydia, or condom use with regular non-paying partners (Kerrigan et al., 2013). Additionally, modeling of a combined community empowerment and early initiation of ART intervention demonstrated a significant impact on reducing HIV among both sex workers and the general population (Wirtz et al., 2012).

METHODS

This brief draws primarily from the 10 in-depth interviews (IDI) with FSW and 2 focus group discussions (FGDs) (with 10 and 7 FSW participants, respectively) conducted for the overall Iringa strategic assessment. It also draws upon interviews with other participants who discussed sex work in their responses, such as staff members of non-governmental organizations (NGOs), health care workers (HCW), government administrators, truck drivers, drug users, and plantation workers. Additional interviews were conducted for a separate secondary study on motherhood among FSW, and some themes from those interviews that were relevant to this brief were included in the analysis. This secondary study included 30 interviews with FSW; 3 FGDs (with 6, 8, and 8 participants, respectively); and 13 key informants (5 HCW; 5 NGO staff; and 3 bar owners/managers). Given that 3 FSW were interviewed for both the strategic assessment and the secondary study, this analysis includes a total 40 IDIs among 37 individual FSW.

FSW were recruited for participation at entertainment venues such as bars. Women were eligible if they worked in an entertainment venue and reported exchanging sex for money within the past month. Venues were included from a variety of geographic locations (Iringa, Kilolo village, Ilula, Mafinga, Makambako) and a variety of bar types (modern bars, local bars, truck stops, groceries). Recruitment occurred during the day, when FSWs were not busy finding clients or working in bars. Sometimes, interviews were set up for another day to give a woman more time to consider her decision to participate and to select the time and location of her preference. Interviewers were Tanzanian ethnographers trained and experienced in qualitative research. Interviewers first approached stakeholders such as bar managers to introduce the study and seek permission to recruit FSW in the venue. Potential participants were then approached directly by the researchers. In rural areas, researchers approached village leaders to assist with recruitment. All participants gave informed oral consent. Interviewers conducted the interviews with guides to direct questioning around certain topic areas, yet were encouraged to probe on responses to explore related topics and experiences. Interviewers also recorded each participant's age, marital status, education, and venue. Interviews generally lasted under an hour. All interviews were conducted in Kiswahili or English, transcribed, and translated into English.

Qualitative data analysis for the Iringa strategic assessments followed Crabtree and Miller's five steps in the "interpretive process": (1) Describing, (2) Organizing, (3) Connecting, (4) Corroborating, and (5) Representing (Crabtree & Miller, 1999). Throughout the data collection, regular debriefing sessions with interviewers and study staff were held in order to identify preliminary findings for rapid use and to facilitate an iterative process of data collection and analysis. After data collection was complete, full transcripts were analyzed according to a two-step process. To accommodate the large amount data, a simple initial set of codes was first developed to identify text relevant to the five key intervention components: cash transfers, HIV testing, HIV treatment, male circumcision, and interventions with sex workers. These codes were applied using the computer software package Atlas.ti (version 5.2, Scientific Software Development GmbH, Eden Prairie, MN).

Following this initial coding, the resultant text coded under the FSW topic was reviewed and a more detailed codebook was developed based on preliminary identification of themes specific to FSW. This codebook was discussed among team members, and after agreement, codes were applied using Atlas.ti (version 7.0). Once this second round of coding was complete, queries were conducted using Atlas.ti's families function, and summary memos were created for each major theme in close corroboration with the data. Data from summary memos and representative quotes were developed into the results presented in this brief.

Ethical approval for this study was received from institutional review boards at Muhimbili University of Health and Allied Sciences, Johns Hopkins Bloomberg School of Public Health, and the Tanzania National Institute for Medical Research.

RESULTS

Characteristics of the sample

Demographic characteristics

The average age among the 37 IDI participants was 28 (range 20-39 years). They were recruited in Iringa town (n=12), Ilula (n=12), Mafinga (n=4), Makambako (n=5), and Kilolo (n=4). They worked in *baa* ("modern bars"; n=16), *vilabu* ("local bars", sing. *kilabu*; n=16), *grosary* ("small restaurant/bars"; n=2) and multiple sites (n=3). Almost three-quarters of the women had finished primary school (n=27), while 13.5% had some secondary school (n=5), and the same proportion had no formal education (n=5). Approximately half of the women reported their marital status as single (n=21), while others were divorced/separated (n=10) or widowed (n=5). While just one FSW reported being formally married, about half also had regular, non-paying sexual partners. Over 90% of the women had living children. Five disclosed that they were HIV-positive.

Of the five FGDs were conducted; two focused on ideas for and reactions to potential structural interventions for FSW as part of the Iringa strategic assessment. Ten 18-24 year-old women from Ilula (Kilolo District) participated in one; seven 23-34 year-old women from urban Iringa participated in the second. The three additional FGD were part of the secondary study on motherhood; these included three women from Iringa urban, eleven form Ilula, and eight from Makambako.

Work environment

Venues and clients

In addition to *baa*, *vilabu,* and *grosary,* FSW reported working in discos, guesthouses, and hotels. There were reports of brothels (*madanguro*) in the region, but no brothel-based FSW were interviewed in this study. Various types of alcohol were used heavily in places where FSW work, including *ulanzi* (bamboo wine), *komoni* (corn beer), bottled beer, and various liquors (*konyagi*, gin, whiskey).

The number of clients FSW reported varied from 1 to 3 in the past month to 2 to 3 per day. FSW generally earned 20,000-30,000 shillings ($12.50-$18.75) per sexual encounter, but reported earning as high as 100,000 ($62.50) and as low as 3,000 ($1.88). Women formally employed in venues earned salaries ranging from 20,000 to 50,000 ($12.50 to $31.25) per month, which they supplemented with money earned from sex work. Other FSW earned money exclusively through selling sex.

Clients were both local residents and "passersby," such as truckers and migrant workers. The agricultural seasons had a reported effect on sex work, because many potential clients were employed seasonally in the region. Many FSW moved throughout the region and country to follow the high seasons; while many of these women were from the region, some were from or had worked in Arusha, Moshi, Mwanza, Morogoro, and Dar es Salaam. Others stayed in one place throughout the year. Special events in the year could also be high seasons for FSW, such as Mwenge (the independence torch race), holidays, and any event where crowds gather.

Relationships with bosses and other FSW

Bosses

For those FSWs who were formally employed, owners, managers and bosses were an integral part of their experience at their workplaces. The role of the boss is different from that of a pimp in other sex work settings, as bosses did not appear to control or manage the work of women, and FSW seemed to work quite independently. Bosses paid women as workers in bars and occasionally helped them out in their role as employers. However, these bar worker salaries were often very low, as bosses expected that the bulk of workers' income will come from clients. One health care worker described bars in Kilolo district where managers actively encouraged customers to solicit the bar workers. "For example, a customer may ask 'What about that girl there?' to which a manager may answer, 'Oh, it's up to you. You try by giving her two or three beers, and later you will leave with her; you will come to an understanding [about payment].'" (KII, health care worker). Thus, some bosses also earned money indirectly from the women's sex work in that customers bought more alcohol and spent more time at the bar because of the women there. In certain cases, when an FSW left with a client, the client left money at the *baa*. This was either to purchase a "short-time" room at the bar for sex, usually for around 5000 shillings ($3), or to pay for the FSW's missed time at work, especially if the client was a trucker and taking her away for a few days. In this case, the payment could be as little as 2000 shillings ($1.25). In these cases, when a client left money at the bar, he was paying for a room or for the woman's time lost from work, not for her sexual services. FSW also sometimes left their payments at the counter to ensure the client actually pays or doesn't steal back the money for sexual services.

Especially in *baa*, FSW reported both positive and negative interactions with their bosses (venue owners, managers). One woman cited the "bosses in this business" as one of the problems in the working environment, calling them "troublesome."

> When payday comes it becomes a brawl and not in a civilized way, that you work for her every day without considering the time you leave, sometimes instead of closing at ten p.m. you find that you close at twelve, one, even two. Without caring. She only cares for her profits. When your day comes to tell her, 'Sister, my salary is due tomorrow,' or if for example you tell her it's today—now that's when you are looking for trouble. (IDI, urban *grosary* employee, age 25)

On the other hand, FSW reported positive interactions with bosses. "If you get a problem you just tell the boss, the owner of the bar, and he will help you," said one FSW (IDI, urban *baa* employee, age 23). Some bosses also provided a shared back room at the *baa* for workers to live, and might include some staple foods in the monthly allowance. A boss could also serve as a mediator in conflicts between FSW: "It's a big fight, but our boss is always there" (IDI, urban *baa* employee, age 22). One *baa* manager reported being frequently woken up in the middle of the night by his employees to help them settle disputes with clients. He also said he frequently warns them about HIV and other STIs, as well as pregnancy.

Other FSW

Participants reported both conflict and cooperation between venue workers. Competition for clients caused many conflicts. If a woman saw another FSW with a man she had yesterday, "She becomes angry, thinking, 'why did he come to her place and not mine?'" (IDI, rural *kilabu* owner, age 25). Those two women could verbally or even physically fight. "Yes, we quarrel. Why not? We fight each other seriously […] We fight for men" (IDI, urban *baa* employee, age 22). For example, women who were new to a particular venue were said to attract men away from the venue's regular FSW, stirring jealousy.

> Yeah, we used to fight a lot back when I just got here[…] I was a newcomer. Yeah, so they knew they had been here for so long that the men are used to them. And since I am a newcomer, men will be more attracted to me, and if he came to sit with me, they got angry. (IDI, urban *baa* employee, age 23)

FSW also tried to make each other jealous over the amount of money they made from a client.

> You can meet one client who you like, he has really attracted you. Now there's the habit of telling each other stories, you understand? We tell each other stories, things like for example, "That *kichwa* [lit. "head," meaning client] from yesterday? I landed seventy [thousand] in my hand, or one hundred thousand," you see?[...] So that [woman] who heard the story, she will desire it. (IDI, urban *grosary* owner, age 27, HIV+)

Others preferred to avoid such conflict. "In my case, I don't like quarrels, so when I am drunk, I just depart back home. So we ignore each other and there is no fighting" (IDI, urban *baa* employee, age 22).

FSW also reported positive interactions with each other, even forming informal networks and lending schemes (see below). They helped each other in times of need, such as lending money, sharing food, or visiting each other when sick, often referring to each other as *dada* ("sister"). They could also visit each other and went to bars looking for clients together, or helped their fellow FSW by telling them about potential clients. Some shared tips about how to deal with clients.

> She [a fellow FSW] is the one who taught me that if a guy tells me that he loves me, I should tell him to give me money first before we leave together, or else he might change his mind later [and not pay the fee]. It's true, because it has happened many times. (IDI, urban *grosary* employee, age 39, HIV+)

FSW even encouraged each other to get tested for HIV. One woman said, "I went to test. I had a friend with whom I worked here. We went to test together[…] We just gave each other the idea that, 'Let's go and test.' If you are found positive, it's better to start taking medicine early" (IDI, urban *baa* employee, age 25).

Dynamics of risk and vulnerability

Stigma

Community

Though stigma against FSW from the community was not a focus of any interviews, there was some evidence that sex work was stigmatized. In interviews with various community members, for example, participants were asked about the main drivers of HIV in Iringa Region. Multiple participants cited barmaids, bars, or activities in bars, implying sex work. Many others specifically blamed FSW for HIV. They also mentioned plantations, the highway, industry, and associated migration of people without their families, all of which was seen to result in purchasing of sex as a driver. When asked about the HIV rate in Iringa, one NGO worker's first answer was, "Let me say, sex work." When a gender-based violence service user was asked what puts people at risk for HIV infection, she answered, "Apart from *vilabu* and *baa*?"

FSW participants themselves did feel the desire to keep their work private and secret, fearing negative consequences, though there were no stories about actual consequences in this sample. One woman mentioned the possibility of being "warned" by community members, saying they would be embarrassed if FSW were too public about their work.

Self-stigmatization

Some self-stigmatization was noted in the way participants talked about their own work as well as how they talked about other FSW. Some used the word "shame," and some talked about wanting secrecy. "Truly, what I can tell you is, here […] most of the women are doing that business, but they don't want anyone to know about it […] Some are worried about what society will think of them" (urban *grocery* owner, age 27, HIV+). One FSW felt that this shame of self led to negative consequences, such as not being upfront about asking for money from clients, thus getting cheated.

On the other hand, a few FSW expressed pride in their work, because it enabled them to take care of their financial needs, as well as those of their children, siblings, and parents, building them houses, or paying school fees.

> I can say that it comforts me when I have thoughts of getting ten thousand [shillings], because when I get it, the worries disappear. For example, I may have a ten thousand [shilling] debt, and I may say "let me pay it." Or now I can do anything which I'm required to do. What about my mother in the village who needs fertilizer? […] So I have to make sure that the casual laborers helped my mother. (urban *grocery* owner, age 27, HIV+)

HIV status disclosure

Five FSW openly revealed that they were HIV-positive.[1] Others reported they had tested but did not disclose their status, and still others did not discuss HIV testing at all. Two talked about being told to return in three months for re-testing (suggesting they tested negative). No FSW reported discussing or asking the HIV status of any of their clients; most specifically stated that they did not and could not know the HIV status of their clients, since they were just "passersby" or men they had just met. However, one woman reported that she had a client ask her about her status. Otherwise, HIV status was not discussed between FSW and their clients, though a few participants had discussed this topic with their regular partners.

HIV perceptions

One key misperception FSW held about HIV was the idea that transmission can only occur in the presence of visible *michubuko* (abrasions or sores caused by friction) or ulcers, e.g., if there is visible blood. This misconception is particularly dangerous when it is used to justify forgoing condom use during sex. For example, one woman had a client refuse to use a condom. She said that he apologized In the morning, saying, "Even if you are infected, [I] can't get infected." When asked why, he said that "if [my] penis is ulcerated, that is when [I] can be infected" (urban *grosary* employee, age 39, HIV+). One trucker indicated that one woman asked him to remove the condom he was using because it was causing her abrasions.

There was an idea that *michubuko* were created during penetration; thus, preventing *michubuko* was seen as an effective HIV-prevention strategy. As one woman explained about having sex with men of unknown HIV status,

> If a man does not have a condom or he does not want to use one, then you just have to have prolonged foreplay before he enters you to ensure enough lubrication so that he won't take too long to ejaculate, also in order to reduce friction. (IDI, urban *baa* employee, age 23)

This FSW had learned that this technique was an effective HIV-prevention strategy from a female condom outreach worker. This idea was not only expressed by FSW participants; it was held by NGO and health care workers as well. One NGO worker used this idea to explain why young women aged 15 to 24 have higher rates of HIV than young men:

> Her organs are not matured enough, but she has started sex when she is even 14 years old, and we say that for them it is easy to get abrasions, so for them it is easy to open possibilities [for the virus to enter]. Especially if she gets involved without using condoms with a person who is infected, to acquire infection is easy. (KII, NGO staff)

An STI and HIV treatment specialist explained it this way:

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[1] Since the end of this study, three FSW who were interviewed have discovered they are now HIV-positive. Thus, eight of 37 in-depth interview participants have disclosed as HIV-positive to date.

> Even if it happens that the virus can be ejaculated there [in the vagina], it cannot get an opportunity to enter because there is no place to get inside. But if there is a sore, it means it is very easy for the virus to be able to pass there, it meets with those cells which have an attraction with HIV. So it will be easy. But if the skin is intact, there is no sore […] it will be not easy for the virus to get inside because it is necessary that the virus pass through a place where there is a certain abrasion. So when I say "open" it means there is an abrasion, there are sores. So I am giving an example that if you leave the door open, a thief comes at night, and comes across an open door, it is easy to enter inside and he will take your things. (KII, health care worker)

Condoms

A few FSW in our study reported using condoms with clients, and gave several reasons for this: not knowing the client, not trusting the client, preventing disease acquisition, and preventing HIV transmission. Additionally, one FSW reported that a client wanted to use condoms "for his health," and one said she had used condoms because she wanted to stay healthy to raise her child. Two HIV-positive FSW also mentioned condom use without giving any reason; for these women, condom use appeared to be a given. Others said they refused to have sex without using condoms. One mentioned she carried condoms herself, and she and others said they ask their clients to use condoms.

Conversely, FSW also reported reasons for not using condoms. One reason cited was that a client was drunk. Another was because clients did not want to use condoms, and since they were paying and the FSW needed the money, the women agreed. As one woman explained:

> AIDS itself is scary. But what may let you not to be afraid of HIV is the money he gives you, since you have nothing, even if he does not want to wear a condom then you just have to sleep with him, though you never know whether he has HIV or not. (IDI, urban *baa* employee, age 23)

Clients sometimes gave reasons for not wanting to use condoms, such as delay of ejaculation. Clients could offer more money for sex without condoms, though only one woman mentioned this as a reason for non-use. Two women reported being forced to have sex without condoms after they asked and the clients refused.

FSW seemed familiar with condoms as disease prevention tools; very few never discussed condoms at all during the IDIs and FGDs. A couple of participants reported using condoms with their steady lovers as well as with clients. Some mentioned outreach workers who come to venues to teach about condoms, including female condoms. One participant said that condoms are available at the bar for 500 shillings per packet. For some, "Salama" was a known brand name and used as a generic term for condoms.

However, there was also some distrust of condoms, including fear that condoms would break and the idea that "accidents" (i.e., acquiring HIV) would occur whether or not one uses condoms. Thus, women reported strategies to reduce likelihood of breakage, such as engaging in foreplay to increase lubrication and reduce friction.

Alcohol Use

Venue-based sex work could not be separated from alcohol consumption. The venues where FSW met clients all served alcohol, and FSW and clients alike drank. As one NGO worker explained,

> It's really cold in Iringa and people really drink, they drink a lot and it does not just end there. They end up having sex when they drink alcohol, and these women who sell their bodies are there, they end up having sex, and what is more, unprotected sex. (KII, NGO staff)

Alcohol was a key part of the interaction between FSW and clients. Buying drinks for a woman could be seen as the beginning of the sex-exchange negotiation. Men could feel cheated if the women did not later agree to sex with them, even becoming violent, as in one reported case. Alcohol alone could be enough to purchase sex (as reported by one drug user client), though FSW participants said they expected cash in addition to alcohol.

Truck drivers and drug users in the sample who reported purchasing sex discussed alcohol's influence in increasing their sexual desires, leading to purchase of sex. Alcohol was seen as decreasing the man's decision-making abilities as well, thus making condom use less likely. Many participants seemed to accept as fact that drinking led to sexual desire which led to having sex without a condom; this was discussed by many clients as well as those not in the sex business. A community HIV/AIDS committee worker said,

> When you drink up to 10 p.m., you know that there are a lot of temptations with the woman who is selling [alcohol] to you […] When you drink until you don't recognize who you are, and you start to hit on the woman who is serving you. And since she wants more money she will definitely agree. Do you even remember to use protection? No way. When will we remember that? We just go out at the back and finish our business. Yes [...] we get it over with there on the grass. So you see, the risk in that case is with alcohol. (KII, health care worker)

FSW themselves reported alcohol use by both themselves and clients, but said nothing about it increasing their own sexual desires. Rather, it increased "temptations" to exchange sex for money.

> Don't you know alcohol has its temptations? Yes, it is such that if you leave [home], you are going to exchange money for sex, because sometimes you have no money, and then a person is wanting you sexually, you see, it's just best you do it. (IDI, urban, *kilabu* patron, age 23)

One FSW mentioned drunkenness of the client as a reason for not using a condom, while another said a client used it as an excuse the next morning for not having used one. FSW's discussions of condom non-use mostly centered around reasons other than being drunk.

One FSW spoke about alcohol in a way that suggested alcoholism: "Haven't we become used to alcohol? So when you don't drink alcohol, sometimes you feel ill […] Don't I just feel like my body is not right?" (IDI, urban *kilabu* patron, age 23). None of the FSW participants reported drug use during interviews

about sex work, although the FSW who provided the last quote was also interviewed in the study as a drug user. In her drug use interview, she reported sex work as a way to get money for drugs, and also traded sex for drugs. An additional drug user was also female, and reported the same.

Violence

Clients

FSW experienced violence in their work. Though there were verbal and physical fights between workers (fueled by both jealousies over men as well as alcohol), most violence they reported came from bar patrons and clients. Women were sometimes treated poorly by men at the bar, who derided them as "just barmaids," and spoke crudely to them. After having sex, some clients became verbally abusive, refusing to pay, saying, "You're just a prostitute. Why should I pay you?" (IDI, urban *baa* employee, age 23).

Another woman related a story where a man gave her money, but expected sex in return at the time and place of his choosing, using violence to achieve it:

> Someone gives you money; he just gives you money saying, "Just take this money, use it to do your things."[…] Later on he will harass you, beat you, or he may go to your home and cause some destruction […] He may break the doors just to enter inside and succeed in getting what he wants. (IDI, rural *kilabu* employee, age 28)

Once alone with clients, FSW were at risk of both physical and sexual violence. Multiple women reported being beaten, forced to have sex without condoms, forced to have sex with men they would prefer to refuse, raped, and gang raped. Many FSW said they had never experienced violence, but they shared cautionary tales with each other, especially about being raped by unfamiliar men. Women also shared stories of negotiating for sex with one client, only to find that there were multiple men waiting once they arrived at the guesthouse. One sex worker described how that happened to her friend. When the woman demanded payments from all men who had just gang raped her, they denied her. When she threatened to take the case to the police, they killed her. Other FSW in Makambako reported hearing of murders of FSW in Morogoro and Songea, but not in their town. Participants did not suggest ways to avoid such incidents, other than avoiding sex with strangers or leaving sex work altogether.

Police

Participants reported no violence from police, even when specifically asked about harassment or violence from police; rather, the police were reportedly sympathetic to FSW (see "Non-Health Services" section on page 16 for more on police interactions).

Partners

A couple of FSW participants also reported experiencing violence perpetrated by their regular intimate partners, including ex-husbands. This was a primary reason for separation or divorce for at least one woman, who related,

> I broke up with my husband, yes, I just broke up with him because he likes fighting. He sleeps around, he likes fighting, and he cut my back with a razor blade. That is when I

> decided to run away from him, and came here […] He sleeps around and comes back at midnight. If you ask him why, he gets angry and starts beating you. (IDI, urban *baa* employee, age 23)

This woman showed the multiple scars on her back during the interview. Two other women reported "fighting" or "cruelty" from former husbands or partners, which led to them separating, but it was not clear if this was physical or other types of violence. For another woman, who was the only married FSW in the sample, being caught with a client or being suspected of being with a client resulted in beatings by her husband (IDI, rural *kilabu* employee, age 25). Another woman reported violence from her partner for similar reasons (IDI, rural *kilabu* employee, age 23).

Migrancy and residential instability

It was evident from the interviews that many FSW experienced migrancy and movement, sometimes for marriage or work, and sometimes to specifically follow the movements of potential clients or seek other bar work elsewhere. For example, one woman reported she was born in Iringa, but had worked in Mbeya, Dar es Salaam, Zanzibar, Arusha, and even Kenya. While more than half of FSW participants were from Iringa and Njombe regions, others were originally from Mbeya, Morogoro, Ifakara, Mwanza, and Arusha. Others had lived and worked in Dar es Salaam. There was some indication that FSW move around within the region to target high seasons of tomatoes, tea, and timber. Additional work associated with this study suggests that the average bar worker contract is approximately three months long and renewable.

Participants were not directly asked about their residential situations, though some volunteered that they live in back rooms provided by bar managers, often with several other workers. Other women rented rooms in houses where several other tenants also lived, some younger women lived with their parents, and a couple of women had been financially successful enough to build their own houses. Further research will need to be conducted to elucidate how housing may be associated with risk dynamics.

Poverty and economic hardship

One main motivation for engaging in sex work was financial difficulty: they were poor, had families in addition to themselves to take care of, and they had few or no job skills. "It is the only work available, nothing more than that" (IDI, urban *baa* employee, age 23). This motivated some women to accept unsafe sex in return for higher payments. One woman had many family members depending on her alone:

> In total, there are seven children depending on me […] I have my late sister's child and my late brother's child. The other one is my late older sister's child […] So my own children are three among those. And the other are my late sisters', they are all depending on me. In total they are four in number, together with my mother. My mother has nowhere to get a piece of soap, except from me. I think I told you about my three sisters who all died in a very short period of time? All those children who remained were my responsibility. I was the younger sister, but it was so. I beg the Lord and thank him for this, that I am able to take care of them through sex work. So I can

> say that is the thing that made me enter into sex work since I had no one to depend on, I have neither brother nor sister. (IDI, urban *baa* employee, age 27)

Another related motivation was the loss of a supportive relationship, such as the death of or abandonment by a spouse. In turn, this led to financial difficulty and the sudden need to support themselves (and often, children).

> I have two children and a small baby, and I live with them. Since the time when their father died, I am living with them. We struggle on our own. I don't have anyone to help me, and I don't have anything else. Maybe like these situations where I am forced […] I am forced to fight for money in any way. (IDI, rural *kilabu* employee, age 28)

While many sex workers talk about their work as a way to earn money in the absence of other jobs, others see it differently. "Some do it because they are used to this job, and they are satisfied in their hearts" (IDI, urban hotel employee, age 39).

Some found economic security through sex work, saving for emergencies, and building a life for themselves and their parents. One such woman, who owns her own *grocery*, explained:

> I have a lot of responsibilities to fulfill. So I may get a customer to give me twenty thousand, I may spend five thousand for my children's food and other five I may save it and the other ten thousand I keep it for emergency cases. (IDI, urban *baa* employee, age 27)

Later, she explained she was determined to build a house for her mother in the village, and used her sex work income to do so.

> I had to finish building my house […] I had to make sure that she [my mother] had a place to live […] I grew up in an old house roofed by thatch. You know village life is very hard. I thought that even if life is tough, I had to make sure I had a place to live […] I had to prepare a good environment for my mother, so I built a nice house with four bedrooms, a sitting room, a storage room, bathroom and toilets. I finished and she is living there now. [...Working as a sex worker] enabled me to build that house. (IDI, urban *baa* employee, age 27)

Services access and needs

Clinical services

Interviews indicated that women feared being stigmatized or treated poorly at clinics. Enacted stigma was not reported, but this may have been because women did not disclose their occupations. Rather, they pretended to be monogamous, married women, hiding their true risk profiles.

There were no dedicated services for FSW in Iringa, and no providers were trained to specifically meet the needs of FSW. One NGO, EngenderHealth, was currently in the process of developing training manuals for health care workers to meet the needs of populations at heightened risk for HIV, including

FSW. Gender-based violence services were newly available in the region, but targeted children and aimed to keep married couples together. Family planning services and antenatal care, which included provider-initiated HIV testing, were also geared toward couples. This was problematic for FSW, who were typically not married, but often experienced both planned and unplanned pregnancy. FSW reported being refused HIV testing during pregnancy if they did not have a husband to accompany them.

> These days, you can't carry a pregnancy with the father not around, because if you are pregnant and go to the clinic, they don't test you [for HIV], they don't give you an [ANC] card, until they see the father, so they can test you and they can test the father. (FGD, urban Makambako district)

Some women felt the need to deceive health care workers about their non-existent husbands, so they could get care.

> In the past, they just went to the clinic to test. There was no asking about your husband and what not. You just gave your name and your husband's name, that's all. But nowadays, really, if you go to the clinic and there's no father, you are not allowed to test. Maybe you find another way, saying he's traveling and went far away. If you say he died, deceiving them, they tell you, "Go to your village leader and bring back a letter saying your husband died." Now, really, they don't test just anyone. (IDI, urban *kilabu* employee, age 28)

Some women felt that such deception (and inability to produce a husband) resulted in sub-standard care or no care at all. "If you don't open up to them, that you do this particular work, you will not be received like she who came with her husband. Meaning you will be stigmatized, and you will not get services until you deliver [the infant]" (FGD, urban Kilolo district).

Thus, some FSW in Ilula found that FSW received the best care if they were open about being "barmaids."

> A large percentage of us like to open up to the doctors and nurses, because there they ask you, "Do you have a husband?" If you say yes, well, they tell you should come with your husband so you can both get services. Thus, we open up completely, saying, if you are a barmaid, you say, "I am a barmaid," and a lot of us use the word barmaid […] Because a large percentage of barmaids aren't seen to have husbands at all, so they're always getting pregnant, and when we are received [at the clinic] we are tested and everything, and we continue on in care until delivery. (FGD, urban *baa* employee)

On the other hand, being open about being a "woman who exchanges sex for money" might get different results. One women said "they direct you to the HIV clinic, I mean, over there they will not give you any services others than HIV testing and starting medications. They just know straight away you're infected" (FGD, urban Kilolo district).

While FSW in the sample were not aware of clinical services specifically for them, some did talk about friendlier clinics where FSW went for STI treatment and reproductive health care. Some FSW in our study reported seeking and receiving treatment for STIs, as well as clinic-based HIV testing and care and treatment services. No participant reported being stigmatized at these preferred clinics, though only rarely did they disclose their sex worker identity. As sex work was not often spoken about openly in these clinics, clinics did not offer prevention information specifically targeted toward FSW. However, not all FSW in our study sought HIV prevention and care services. Some also indicated that they knew of other FSW who were too afraid to go to the hospital for HIV testing because they feared a positive test result.

Outreach services

PSI and Jhpiego's joint UHAI-CT program provided occasional services targeted to FSW and their clients. PSI's "Salama Nights" were venue-based evening music events designed around HIV prevention education, condom demonstrations and social marketing. They also sold boxes of subsidized condoms to managers, who then sold to customers for a profit. PSI-Husika specifically targeted FSW with peer "case managers," to help FSW reduce risk and attend services, but this program was yet to roll out in Iringa Region. UHAI-CT visited 31 venues in Iringa to provide nighttime HIV testing and counseling on-site to FSW as well as bar patrons, including male and female condom demonstrations.

A couple of FSW mentioned being visited by outreach workers, remembering that workers came twice to "educate us on condoms and all that" (IDI, urban *baa* employee, age 23). One other FSW had some familiarity with mobile testing services and indicated that she would like to see more of these services.

In Makambako, the FHI-ROADS intervention targeted "low income women," including some FSW. A couple of IDIs and a FGD among women in Makambako indicated women were learning about contraception, among other things, through this program. However, the program employed standard contraception training geared toward co-habitating couples. One FSW who was a peer outreach worker proudly described the training she had received and given, but the inadequacy of this training for FSW was clear:

> You two should plan your reproduction, the father and the mother, saying "Let's have children, *bwana*; we have a child, now let's plan to use birth control. Let's have implants, or put in an IUD," or whatever. You advise each other. "Now, *bwana*, to have another child now is not good." (IDI, urban *kilabu* employee, aged 39)

Non-health services

Police

FSW in multiple towns indicated that police were sympathetic to FSW; in Makambako, they said, "police are our clients," and in Iringa, Ilula, and Makambako, the police reportedly sided with FSW when clients refused to pay after services rendered. One woman described how the police had helped her multiple times when clients refused to pay:

> They [the police] help us. I myself have go about four times, and they helped me every time. Because they say [to the client], "[…] you have seduced her yourself, and you gave her money yourself, why take your money [back]?" So they really help us. (FGD, urban *baa* employee)

Another woman elaborated on her experience:

> Yes, that is, if we go to the [police] station, they talk like this [to the client]: "This woman had some problem that drove her to accept you [as a client], it's not that sleeping with you was for her entertainment. She agreed to it in order to take care of her problem. You need to give her this money in order to help her; she will have children and she is supposed to cook breakfast for them now. With what [money] will she cook breakfast for them now?" So they help us at the station (FGD, urban *baa* employee).

A third woman also related a story in which the client refused to pay the full agreed-upon amount, so she locked him in the guesthouse room and returned with police. The officers locked him up in jail; the participant successfully got her money, and left the man there. Additionally, a bar manager related several cases where he involved police when clients become violent and/or refused to pay; the police always sided with the FSW in these incidents.

Other services

FSW did not discuss experiences with non-health related social or legal services, perhaps suggesting a lack of access to such services. Future research could consider the experiences of FSW with these services in the region. Financial services are discussed below.

Intervention ideas from FSW

FSW were asked in IDIs and FGDs what interventions they felt would be appropriate for them. Women spontaneously discussed financial services, community mobilization and empowerment interventions as well as health interventions. However, they also described other problems they faced for which they did not have suggested solutions, such as violence from clients; negotiating payments, condom use, and types of sex acts with clients; the legal status of sex work; the stigma of sex work; having financial dependents; and lack of education.

Community mobilization and empowerment

Some FSW supported the idea of having FSW form groups to address their problems and cooperate with each other. Some mentioned the idea spontaneously, while others were responding to a question posed by interviewers. As one explained,

> So maybe for my fellow women who are doing this sex work […] we're supposed to organize ourselves in groups and maybe private persons or organizations would talk to us and know our problems […] and by this way this problem of AIDS would decrease so much (IDI, urban *grosary* owner, age 27, HIV+).

Another felt that cooperation would be a good thing:

> As barmaids we should cooperate with each other, in that you go to a counselor and ask how to go about something, and whatever is required then we should cooperate with each other […] There will be a lot of benefits because even for those who never knew how to protect themselves, how they should live, how their fellow [barmaids] live. There will be many benefits. (IDI, urban *baa* employee, age 20)

Some informal networks had naturally formed among FSW. The participants in one of the FGD were already an informal network of FSW; they knew each other, had established good rapport, shared phone numbers, and considered themselves a network. They regularly shared information such as strategies on how to ensure that clients paid—for example, require the client to pay before going to a room or have a friend hold the cash while entertaining the client. Others warned fellow workers against non-paying or violent clients. Future mobilization efforts could build upon such already existing networks.

FSW had many ideas on how to best run or improve interventions for them. These can be divided into several categories: formalization, leadership, activities/procedures, financial issues, and identification/labeling.

Women wanted FSW groups to be formalized with written constitutions and registration as a group with the government. They felt that formally elected leaders, by the group and from within the group, were best, including chairperson, secretary, treasurer, and loan officer, as relevant. As they were unfamiliar with this type of mobilization for FSW, some suggested they have an experienced person from outside come to help them begin the process.

As for group activities and procedures, women thought they should meet regularly (weekly or monthly) and group members could teach each other skills some of them may already have, such as tailoring or farming. They also desired that the group provide vocational and/or business training, which would provide them with additional income, and, they felt, would keep them too busy to see clients, reducing their overall number of partners. As one FSW said, “If you have a business, it keeps you busy, and these other matters won’t come up” (FGD, Iringa urban district).

Some FSW felt it was important to have some sort of identifying feature for the group, such as uniforms or other distinctive clothing. At the same time, they worried about the legal and social status of sex work, so they suggested the name of their organization should not reveal their occupation or behaviors. Though women were positive about an organization, they also worried about its potentially negative effect on their reputations, particularly when they worked in towns they grew up in. As one woman put it, “According to how I see it, many will agree to form an organization, but a few will not agree because of shame” (IDI, urban *grosary* employee, age 39, HIV+); this particular participant volunteered to mobilize women herself. Another participant said FSW would not join because “they don’t want to be known […] [they] may feel embarrassed,” but overcoming that was “a matter of getting to know with each other” (IDI, urban *baa* employee, age 22).

Beyond the shame or stigma, one woman feared forceful intervention by the government, should they find out about a group of sex workers. “[The government] will not be happy about it […] they will not be happy about a group appearing as a group that exchanges sex for money, they will not like it at all. They

could fight a battle against it, like soldiers could come arrest us" (FGD, Iringa urban district). Women suggested cleverly naming the group in a way that disguised that it was for FSW. "There should be a group, but it should not appear as a group of people who exchange sex for money" (FGD, Iringa urban district).

Some of the women saw such an intervention's goal as encouraging women to stop sex work. "I think we should organize a group to mobilize each other. We should work to stop commercial sex" (rural *kilabu* owner, age 25), said one. However, she went on to question what would happen after stopping sex work:

> I will also ask: where shall we get money for food if we are to stop this job? Or where will I get a rent for my house? Or where will she get money for clothing? (rural *kilabu* owner, age 25)

Financial interventions

Many women expressed desire for financial interventions. FSW spontaneously suggested and strongly supported financial aspects to any groups or interventions, especially funds given to groups to support alternative or supplemental income:

> I think it would be beneficial. If they would think about us and say "Here is the money that you have been given for your group," it would be a benefit. (urban *baa* employee, age 25)

> Maybe if someone comes and wants to help us [saying] "You, twenty female sex workers come and we will give you a plot to cultivate rice or tomatoes or maize and we will cover all costs, and that will be your work." Then that's one of the ways of keeping us busy. (urban *grosary* owner, age 27, HIV)

As mentioned above, women suggested financial interventions such as vocational or business training, as well as specific ideas such as cooperative farm plots to sell vegetables. FSW explained that their access to loans was limited because of high interest rates, their residential instability, and the fact that sex work is not recognized as a legitimate job. Nevertheless, women desired access to loans with low or no interest. Although one woman reported successfully using "barmaid" as an occupational title in order to access bank services and others reported having savings accounts, FGD participants generally felt they were unable to access traditional financial services.

FSW also suggested forming group lending schemes such as SACCOS. In SACCOS, a group of people unified by something (e.g., the same occupation) all contribute a fixed amount of money to a common savings each month. Contributing members then have access to the money as loans, either in systematic rotation or as needed (e.g., for a funeral or medications in the case of an illness). SACCOS are generally institutionalized, having physical offices and written protocols. Reportedly, there was a SACCOS for FSW in Isele (near Ilula in Kilolo district), though it was unknown the extent to which this was a formalized SACCOS group. However, other FSW reported having formed informal savings groups, called *mchezo*

("game") or *mkopo* ("loan"), among fellow FSW, giving each other money in rotating funds, much like formal associations.

Women suggested other financial aspects to FSW groups, such as group bank accounts, or regular monetary contributions from members to help each other as needed. Some cautioned against mismanagement of funds, and emphasized the need for formal constitutions and loan officers. There were also worries that women might use funds to buy alcohol or nice clothing, rather than the intended use of economic betterment, and suggested that procedures be put in place to prevent this.

HIV prevention & treatment

When asked about the needs of FSW, or what kinds of programs they would like, women mentioned condoms and counseling for risk reduction. For example,

> I think people should come to educate and advise us […] People should come to give counseling […] We should be sensitized that what we are doing is not safe, though it is known that this is very dangerous, but we should be educated to keep ourselves more careful concerning our health. (urban *baa* employee, age 22)

Another suggested health education, recognizing sex workers' risk for HIV.

> I think financial help through loans so we can be self-reliant, and also seminars, really about education, which should be about our health and current globalization, because for a large percentage of us, this AIDS illness has ruled over us a lot, and we fear it. So that we can protect ourselves, I think we should be given more training so that we can satisfy ourselves and protect ourselves health-wise, this would help us a lot (FGD, urban Kilolo district).

One recommended mobile testing services:

> I think it would be good if people have a plan and say that they will be passing by each place at a particular time, and if they have arrived at a time like this evening when we are at work, they should organize people who are around and tell them to sign up […] for testing […] They will test because they are here, they won't go anywhere […] They will be so happy. It will be a relief, an alternative to going to the hospital. Some people won't go to test in any health center. (urban *baa* employee, age 25)

Discussion

This research indicates that FSW face multiple challenges in their work and social environments, not only the risk of HIV and other STIs, but also pregnancy, violence, high alcohol consumption, family responsibilities, poverty, and stigma. This research also shows large gaps in services for FSW. Previous research has shown that community mobilization interventions can address these larger structural issues and be an effective approach to HIV prevention among FSW (Kerrigan et al., 2013). Based on these findings, we suggest the following comprehensive recommendations, which aim to address not only gaps in health services, but also gaps in other services and structural issues.

Addressing gaps in health services

Many gaps in health care for FSW in Iringa can be filled through mobile outreach services which should include the following services:

- quarterly HIV testing and counseling
- linkages to HIV care and treatment services for women living with HIV
- HIV prevention education
- male and female condom distribution and demonstrations
- birth control counseling and services
- STI screening and treatment
- lubricants for anal sex
- screening for gender-based violence with referrals to services

Clinical services need to become friendlier toward FSW and better cater to their needs by providing targeted risk-reduction counseling, family planning methods, STI screening, and condoms. Because of the fear of stigma, many FSW do not reveal their occupation to health care workers. Health care workers reported treating women they suspected were FSW with respect, though more research is needed to understand the interactions between health care workers and FSW in Iringa. The fact that FSW rarely if ever revealed their behaviors to health care workers suggested that they feared judgment or unkind treatment.

In addition, mobile services should connect to current or former FSW who could become peer educators to motivate, educate, and reinforce messages to FSW on an on-going basis. Educational messaging should continue with standard HIV-prevention and treatment messaging for high-risk populations, including assisting with linkages to HIV care and treatment centers.

To ensure that the complex health needs of FSW are met, we recommend the following additional actions:

- ***Address alcohol-related risks.*** Education about the consequences of alcohol use (drunk clients becoming violent or reluctant to use condoms; drunk FSW forgetting condom use; alcoholism) and strategies on how to deal with drunk clients could be of benefit.

- ***Encourage testing and treatment.*** Not all women knew their own HIV-status, and were having unprotected sex on a regular basis with multiple partners. Two women who did know they were HIV-positive had committed to consistent condom use. Perhaps such behavior can be applauded and modeled among other FSW. Furthermore, HIV-positive FSW should be actively encouraged to enter into care and treatment. Mounting evidence suggests the earlier initiation of ARVs, the better for individual health as well as onward transmission (Cohen et al., 2011).
- ***Provide support, encouragement and skills for FSW to discuss HIV with their clients.*** First, further research is needed to identify barriers and facilitators to discussing HIV with clients. Next, interventions that include modeling and role-playing can help FSW move toward effective strategies for discussing HIV and negotiating condom use.
- ***Address misperceptions about HIV transmission.*** Specifically, the idea that HIV transmission can only occur if there are visible abrasions or sores appears to be harmful, as it can reduce condom use among individuals those that ascribe to this belief. This research indicates that not only FSW and lay people held this misconception, but also trained NGO staff, outreach workers, and highly educated health care workers.
- ***Adapt family planning and PMTCT services for FSW.*** Tanzania has made strides in integrating family planning and HIV services, including PMTCT, with a major push toward couples-oriented services. While these services are appropriate for some women, materials and guidelines need to be adapted for FSW (and other women not in married relationships), who are at high risk of both unwanted and wanted pregnancy, as well as HIV. Currently, both regular clinical and FSW programs in Tanzania address and counsel FSW in family planning, PMTCT, and antenatal care (ANC) as if they are in steady one-partner relationships. This must change to effectively meet the reproductive needs of FSW.
- ***Recognize that FSW have and desire families.*** Most FSW have families to provide for, and reported strong motivations to ensure the well-being of their children. These concepts could translate into effective messaging for FSW; promoting certain health behaviors as means of "staying healthy so you can raise your children," and using the concept of family in promoting empowerment and intrinsic self-worth. Family planning and PMTCT services must also recognize that some FSW desire and seek pregnancy, sometimes outside of steady relationships.
- ***Work to reduce stigma.*** Given the societal stigma and blame directed toward FSW, messaging might be helpful in the broader community to transform the perception of HIV into "everyone's problem," not just something FSW spread.
- ***Address violence with prevention and care***. Violence prevention services need to be adapted for the needs of FSW; currently, they are oriented toward keeping couples together. Participants faced violence from both steady partners and clients, so programming should aim to use different prevention and treatment strategies to address both sources of violence.

Addressing gaps in other services

FSW's access to other, non-health services is also necessary to consider, specifically in regard to the structural factors that put them at heightened risk for HIV. Barriers to accessing financial services that FSW desire need to be identified and addressed. Similarly, participants reported that while social services such as mental health counseling were available, they were not being accessed. Police harassment and arrests were not reported by this sample, yet PSI has reported this to be a problem among FSW in other parts of Tanzania. Further investigation is needed to determine what types of legal advocacy may be needed for FSW in Iringa. As supporting children was a highly desired goal among participants, FSW may find positive benefits in formal assistance with enrolling and keeping children in school.

Practical issues in research or program implementation

When enumerating, recruiting, sampling, and providing outreach services to FSW, the timing of work must be carefully considered. With regards to timing, for example, women are most likely to be available between 3 p.m. and 5 p.m.; other times of the day may interfere with work. Sundays were often good for group meetings, as many bar workers had the day off. Venue-based events and outreach services are potentially feasible locations to access FSW for certain interventions, but it should be noted that FSW might resent the time spent receiving services or participate in research in the evenings when they could be earning money from clients. Seasonality of sex work also must be further understood in order to identify and effectively reach FSW, including those who only work at certain times of the year. Seasonality varies by locality, so discussions with managers of bars and plantations as well as village leaders may help shed light on key seasons for each area (e.g., tomatoes in Ilula, timber and tea in Mufindi, etc.).

Another structural aspect of work that warrants attention is the boss-employee relationship. As management shapes the experience of work for many women, HIV prevention and treatment interventions should consider involving bosses or managers. For example, bosses can be incentivized to supply condoms at sex work venues, and can allow time off work for accessing health and non-health services. However, not all FSW have bosses; some own businesses, and others "bar hop" from venue to venue. These street-based sex workers are more difficult to access and were not included in this study, which is a limitation of the present work. In addition, although not known before the initiation of this study, participants described settings called "danguro," which can be translated as brothels, located in Makambako and Ilula; this type of venue may exist in other towns as well. Since this study did not interview any women associated with "danguro," however, little is known about how they are structured or managed. They may not be structured in the same way as brothels in other settings globally. A study in neighboring Morogoro Region described brothel-like areas consisting of shacks where women both slept and entertained clients, but were not organized or controlled by managers or madams (Outwater et al., 2001).

Community empowerment

Mobilization and empowerment of FSW has been used in a variety of settings to address the social and health needs of FSW, including HIV prevention (Blankenship et al., 2008; Jana et al.,

2004; Kerrigan et al., 2013; Kerrigan et al., 2008; Lippman et al., 2010). Suggestions by participants in this study revealed the potential for formation and mobilization of FSW groups in Iringa to identify and address their specific challenges. Some FSW already had established informal groups based around friendship, some involving cooperative financial savings.

However, there are some potential issues with a community mobilization approach in this setting. First, as some women desired financial support, they might not be motivated to join a FSW group without a financial component. Second, criminalization and societal stigma against FSW might translate into fear to join. Third, many women would believe the purpose of an intervention would be to help them stop sex work. Thus, groups would have to promote well-defined goals related to their specific purposes in advocacy and health promotion. Fourth, there was wide variation in the women's circumstances, from established, independent business women, to women who actively seek clients in multiple venues, to women working for little or no pay in rural *vilabu*. These differences may be challenging in attempts to unite women, and should be acknowledged when creating targeted interventions catered to their specific needs (Shagi et al., 2008).

Strengths and limitations

This study has limitations. FSW are a stigmatized and marginalized population, so despite efforts to ensure confidentiality and sensitivity by interviewers, they may not have been fully comfortable or forthcoming in interviews. No FSW from brothels were interviewed in this sample. More research needs to be conducted in order to understand how FSW in brothels may differ from others. This study also has strengths. FSW were recruited from a variety of venue types in urban and rural locations, and represented a variety of opinions and experiences indicating the complexity of FSW in Iringa. Furthermore, a large proportion of the other participants in the study expressed opinions about sex work as well as experiences working with FSW and being clients of FSW.

Conclusions

This study highlights the major challenges faced by FSW in Iringa, and how they might be addressed in HIV prevention and treatment interventions. FSW worked in a variety of venues, entertaining both local and migratory clients. HIV and condom awareness was evident but far from universal. FSW also faced challenges that impeded safe sex practices, such as alcohol use, violence from clients, and stigma. Some HIV prevention needs of FSW were being addressed through HIV testing outreach services, but there were no clinical services designed for FSW's needs. Many women liked the idea of mobilization and community empowerment for FSW to better address their complex needs, including but not limited to HIV prevention and treatment.

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