



Published in final edited form as:

Stud Fam Plann. 2015 March ; 46(1): 55–71. doi:10.1111/j.1728-4465.2015.00015.x.

Female Sex Workers' Experiences with Intended Pregnancy and Antenatal Care Services in Southern Tanzania

Sarah W. Beckham,

Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, and can receive mail at P.O. Box 1441, Iringa, Tanzania.sbeckha4@jhu.edu.

Catherine R. Shembilu,

Ethnographer, Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania.

Heena Brahmhatt [Associate Professor],

Department of Population, Family, and Reproductive Health

Peter J. Winch [Professor and Director],

Department of International Health, Social and Behavioral Interventions Program

Chris Beyrer [Professor], and

Department of Epidemiology, Behavior and Society, Johns Hopkins Bloomberg School of Public Health.

Deanna L. Kerrigan [Associate Professor]

Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health.

Abstract

Understanding the pregnancy experiences of female sex workers (FSWs), especially in the context of high rates of HIV and sexually transmitted infections (STIs), is essential to tailoring services to meet their needs. This study explores FSWs' experiences with intended pregnancy and access to antenatal care and HIV testing in two regions of Tanzania. Thirty in-depth interviews and three focus group discussions were conducted. FSWs sought to become pregnant to gain respect as mothers, to avoid stigma, and/or to solidify relationships, sometimes posing risks to their own and their partners' health. Pregnant FSWs generally sought antenatal care (ANC) services but rarely disclosed their occupation, complicating provision of appropriate care. Accessing ANC services presented particular challenges, with health care workers sometimes denying all clinic services to women who were not accompanied by husbands. Several participants reported being denied care until delivery. The difficulties participants reported in accessing health care services as both sex workers and unmarried women have potential social and health consequences in light of the high levels of HIV and STIs among FSWs in sub-Saharan Africa.

While most epidemiological research on female sex workers (FSWs) is concerned with HIV and sexually transmitted infections (STIs), in the past few years some attention has been given to the reproductive health of FSWs more broadly and to pregnancy in particular (Chacham et al 2007; Becker et al. 2012). High proportions of FSWs have become pregnant

(70–90 percent in Afghanistan, India, Russia, and Tanzania) (Todd et al. 2010; Wayal et al. 2011; Decker et al. 2013; Ao et al. 2011) and have had children (80–90 percent in Kenya and India) (Chege et al. 2002; Elmore-Meegan, Conroy, and Agala 2004; Wayalet al. 2011; Becker et al. 2012). Furthermore, many pregnancies occur in the context of sex work. For example, Decker and colleagues (2011) report that nearly 9 percent of their sample in Thailand had become pregnant since entry into sex work, and studies in Mozambique and Tanzania report a 17.8/100 person-years and 27 percent incidence of pregnancy, respectively, over an 18-month period among FSWs enrolled in interventions (Vallely et al. 2010; Feldblum et al. 2007). Of about 1,000 FSWs who initiated sex work within the previous five years and registered in a local HIV/STI intervention in Karnataka, India, one-fourth reported that their first pregnancy had occurred while they were sex workers (Becker et al. 2012).

Little is known about FSWs' desires for children and the contexts in which they seek to become pregnant. While FSWs and other women of reproductive age share many pregnancy experiences, unique circumstances also exist among FSWs, given the nature of their work. First, many FSWs have sexual relationships with steady partners as well as with both casual and regular clients, so there are multiple partnerships to consider concerning pregnancy planning (Murray et al. 2007). For example, FSWs may want to prevent pregnancy with some partners but not with others (Kerrigan et al. 2003), limiting their options for birth control. They may also use pregnancy as a strategy to gain a partner's financial support and/or emotional commitment (Murray and MODEMU 2002; Haram 2003). In addition, FSWs, especially those in sub-Saharan Africa, are at heightened risk for HIV infection (Baral et al. 2012; Prüss-Ustün et al. 2013). FSWs who wish to become pregnant may be less likely to use condoms consistently (Aho, Koushik, and Rashed 2013), putting themselves and their partners at greater risk for HIV and other STIs. A study in India found that more than 18 percent of 326 FSWs were planning to become pregnant, and of these, one-third were HIV-positive (Wayal et al. 2011). Another study in India found that more than 90 percent of primiparous FSWs continued to work while pregnant (Becker et al. 2012). Thus, any possible associations between pregnancy and HIV infection, transmission (Mugo et al. 2011), disease progression (Lieve et al. 2007), and maternal mortality (Li et al. 2014) are particularly pertinent for FSWs.

Additionally, FSWs may encounter challenges in accessing antenatal care (ANC) services once they are pregnant. Health services, including family planning, ANC, and prevention of mother-to-child transmission of HIV (PMTCT), are rarely tailored to the needs of FSWs. FSWs may also face societal stigma and discrimination, and legal barriers due to the criminalization of their work, which can cause difficulties in accessing health care and receiving appropriate services (Ngugi et al. 2012; Scheibe, Drame, and Shannon 2012; Scorgie et al. 2013; Grubb et al. 2014). In a study in Kenya, South Africa, Uganda, and Zimbabwe, FSWs reported significant barriers to accessing health services, including stigma and discrimination from health care providers (Scorgie et al. 2013). A report by Human Rights Watch and WASO (2013) documented the barriers and discrimination experienced by both female and male sex workers in Tanzania, including denial of health care.

Understanding the pregnancy intentions of FSWs and the contexts in which they seek pregnancy is essential to tailoring services that adequately meet their reproductive health

needs, keeping in mind the overlapping desires of fertility and HIV/STI prevention among women at high risk of both pregnancy and STIs. Pregnancy care, counseling, and maternal care can serve as a gateway to other services for this at-risk population, such as HIV testing, PMTCT, and postpartum family planning. This study qualitatively explores FSWs' experiences with intended pregnancy and access to ANC services in southern Tanzania.

SETTING

The study was conducted in two regions, Iringa and Njombe, in southern Tanzania. The area is inhabited mainly by the Bena, Hehe, and Kinga ethnic groups, and while the respective languages are the first languages of most people, inhabitants also speak Swahili, the national language. Iringa and Njombe have the highest HIV prevalence in the country, at 9 percent and 15 percent, respectively (TACAIDS et al. 2013). It is unclear why these regions have higher prevalence. It may be partly the result of the numerous plantations in the region, which encourage seasonal migration of workers from within and outside the regions, creating high demand for sex work. Additionally, the Tanzania-Zambia highway cuts through the regions, and entertainment venues such as guesthouses and bars line the highway to accommodate the truck drivers traveling to and from other parts of Tanzania and neighboring countries. At the time of the study, there were no clinical services specifically for sex workers, although there were limited interventions targeting sex workers, such as condom demonstrations and HIV testing in bars (Beckham et al. 2013a).

Site-specific reproductive health indicators are not available for FSWs, but for Tanzania in general, and these regions in particular, fertility levels are high (with a total fertility rate of 5.4 for both). In Iringa and Njombe, 35 percent of women reported using any modern method of family planning, compared with 27 percent nationally, and 97 percent received ANC from a skilled provider, compared with 96 percent nationally (National Bureau of Statistics 2011).

METHODS

Between February and July 2012, a qualitative study was conducted in Iringa and Njombe to document FSWs' experiences with pregnancy and motherhood. This was part of a larger strategic assessment to define a comprehensive response to HIV/AIDS in the area. While there are multiple ways to define "sex workers" (Harcourt and Donovan 2005), and considerable variation along a spectrum of noncommercial and commercial sexual exchange in Tanzania (Silberschmidt and Rasch 2001; Haram 2003; Desmond et al. 2005; Bene and Merten 2008; Wamoyi et al. 2011), we limited our recruitment to adult women who worked in entertainment venues (e.g., bars) and who reported exchanging sex for money within the past month. This approach ultimately included some women who self-identified as sex workers (*dada poa*, literally "cool sisters"), though not usually publicly, as well as women who did not identify with any label but rather reported a particular behavior (*kubadilishana ngono kwa pesa*, "to exchange sex for money").

A female Tanzanian research assistant (co-author C.R.S.) with previous qualitative research experience underwent a two-week training on qualitative research methods and research

ethics before conducting recruitment and interviews. After gaining permission from regional and local government leaders, the research assistant approached owners/managers of entertainment venues, explained the purpose of the study, and requested approval to recruit women. No managers denied permission to recruit. She then approached potential participants (e.g., female bar workers) directly, informed them that she was conducting a study of women who exchanged sex for money, assessed their eligibility, and asked them to participate. Verbal consent was used rather than written, to protect confidentiality. No eligible women declined to participate after undergoing the informed consent process. Interviews were conducted at a time and place convenient for the participants and that allowed for privacy, such as back rooms at bars, rented guesthouse rooms, or participants' homes. Participants were given TZS 10,000 (US\$6) as compensation for their time.

During data collection, sampling was monitored and directed in order to achieve a demographically varied sample with respect to age, geographic location, and venue type. FSWs were recruited in urban and semiurban locations within four districts in Iringa and Njombe to maximize any differences in types of work and clientele. For example, Ilula town had a large truck-stop area, Mafinga town's venues catered to plantation workers, Makambako town contained a major highway crossroad, Iringa town was a regional seat of government, and Kilolo was a small district capital. There were multiple types of venues in the regions, including large "modern" bars that sold bottled beers and liquors (*baa*); smaller bars that sold bottled beer and liquors and perhaps locally brewed alcohols (*grosari*); small, often informal "clubs" that sold mainly locally brewed alcohol (*kilabu*, plural *vilabu*); as well as truck stops, guesthouses, and discos. The socioeconomic status of the women who work in and the clients who patronize these venues can vary (Shagi et al. 2008), so we sought to recruit women from different venues (Wahab and Sloan 2004). Phenomenal purposive sampling (Sandelowski 1995) was used so participants would represent various lengths of time in sex work and experiences with pregnancy and motherhood. Additional women were contacted through referrals from those who had already participated.

An in-depth interview (IDI) guide with open-ended questions was developed to direct questioning toward certain topics, but the interviewer was encouraged to probe extensively. Topics included daily life, work experiences, reproductive history, pregnancy and contraception, motherhood, paternity, relationships, health issues including HIV prevention and care, and seeking health care. In total, 30 FSWs participated in IDIs.

An additional guide was used for focus group discussions (FGDs). FGDs facilitate understanding of social issues, such as norms and expectations (Morgan 1997) and local definitions of concepts of interest (Ivanoff and Hultberg 2006); in this study, these concepts were the importance and meaning of pregnancy and motherhood for FSWs. Three FGDs were conducted with six, eight, and eight participants in three towns: Iringa, Ilula, and Makambako. Some of the participants knew others in their respective groups. Participants were recruited through venues, referrals from other FSWs, and, in Makambako, referrals from a peer educator at a nongovernmental organization who worked with economically vulnerable women, including FSWs. Topics in the FGDs were similar to those in the IDIs.

Interviews were conducted in Swahili, audio-recorded with permission, and transcribed verbatim. To protect confidentiality, identifying information was removed from the transcripts, and pseudonyms were assigned to each woman during analysis. Within 24 hours of each interview, the interviewer (C.R.S.) wrote a summary of the interview, noting major topics and themes. The interviewer and lead author met at least weekly during the data collection to discuss findings, adjust language in the guides, and monitor variation in the sampling. This allowed for a flexible approach in which questions could be changed or added and investigators could pursue new themes that arose during data collection.

The lead author, who is fluent in Swahili, read the transcripts and notes and wrote summaries of each participant's information. Thematic coding was conducted on the Swahili transcripts using Atlas.ti (version 7.0, Scientific Software Development GmbH). Our analysis began with a focus on reproduction and health-care-seeking issues broadly. Incident-by-incident coding was first used to identify sections of the transcripts on reproductive health issues and services. These sections were then coded line-by-line, followed by axial coding to define categories, and memo writing to develop ideas (Charmaz 2006). The lead author consulted field notes, summaries, and the interviewer when clarification was needed. While the general topic of pregnancy experiences was originally in the guide, themes discussed below emerged during the analysis. For this article, we considered all categories and codes related specifically to pregnancy desires during sex work and FSWs' experiences with ANC services. Quotes were chosen to represent the range of themes that emerged from the data on these topics.

As information was gleaned from the transcripts, a matrix was created to facilitate comparisons across participants on key quantifiable characteristics, including location, venue type, age (categorized as 20–24, 25–29, 30–34, and 35–40 years), education (categorized as none, primary school, and some secondary school), reported HIV status, marital status (categorized as never married, divorced/separated, and widowed), current and past intimate partnerships, reproductive histories (number of pregnancies, abortions, miscarriages, live births), and information about children (number, ages, paternity). These data were then entered into Stata/SE (version 12.0, StataCorp) and descriptively analyzed for frequencies, means, and medians, as relevant.

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

RESULTS

Characteristics of Participants

Table 1 summarizes the demographic characteristics and venue types for the female sex workers in our study. The 30 women ranged in age from 20 to 40 years, with a mean age of 29. None was currently married,¹ and more than half had never married although about half

¹Various forms of marriage exist in Tanzania, including common law, religious, and traditional. To define marriage in this study, we asked participants “*umeolewa?*” (Have you married?) and left it to them to interpret their current or former relationship status.

had intimate partners. Three-fourths had primary school education, and five had some secondary school. Three women disclosed that they were HIV-positive, without being asked.

Table 2 summarizes the reproductive histories of the participants. Women had a median of two lifetime pregnancies (range: 0–6), a median of two live births (range: 0–5), and a median of two living children (range: 0–3). All but one of the women had experienced pregnancy and childbirth. The one woman who had never been pregnant (age 26) was included to provide the perspective of a sex worker who had no children but nevertheless had views on pregnancy and sex work. Almost all first pregnancies occurred while the women were teenagers (data not shown).

Women also reported the paternity of their pregnancies (Table 3). More than half of the pregnancies were conceived during sex work, both from casual clients (29 percent) and regular clients (23 percent). Many of those pregnancies were planned. About one-third of pregnancies (36 percent) were conceived with a husband, long-term cohabitating partner, or boyfriend who then became a husband/partner. Another five pregnancies (7 percent) were from casual, nonbusiness sexual partners that did not lead the couple to marry/cohabit, and two pregnancies were the result of rape.

Experiences with Intended Pregnancy

The experiences and comments presented below demonstrate a variety of circumstances in which FSWs might choose to become pregnant. Of interest here was the unique context in which FSWs sought to become pregnant that might put them at risk for poor pregnancy outcomes and/or HIV and STI. Two main themes emerged: the value of motherhood and strategic childbearing.

“To Be Called Mama Is Respect”: The Value of Motherhood—Like most women in Tanzania, FSWs valued motherhood highly. Giving birth would allow them to gain respectability as mothers and avoid the stigma of childlessness. Women wanted to experience having children and families and being called “Mama,” even if they did not have the “ideal” family situation of two biological parents and children. Thus, they sometimes made conscious decisions to seek pregnancy under unsafe circumstances. One woman, for example, had a daughter with a client, but wanted to try for a son. She did this by choosing a particular client with whom she did not use condoms and did not establish a relationship. She explained:

My other [child], the boy—truly I just decided myself.... Oh, I just decided I wanted a boy, that’s all. I found a man. I had a child by him. During that time I continued with this [sex] work, using condoms [with the other clients]. (IDI 525, age 34; multiple sites, Ilula; 3 pregnancies, 2 children)

Mlamka, a mother of three, explained how other FSWs sought pregnancy for a chance to have families:

Some [FSWs] just wanted to have children.. She decides, “Hold on, now should I go to die like this without children?” Thus, she is intending to get pregnant.. She simply decides, “Hold on, now I should have a child..” And there are some who can

get pregnant by their clients, yes. (IDI 519, age 30; *kilabu*, Iringa; 4 pregnancies, 3 children)

Estelle, a mother of two, elaborated on her desire to have children as her peers were doing and to be called “Mama”:

Yes, don't you just sit there, desiring? You are shocked that your peer has a child, and you desire to have a pregnancy, and you go looking to become pregnant.... You desire to bear [children], to have a child, to be called Mama, to have your family. You like that [idea], so you seek pregnancy. (IDI 513, age 24; *kilabu*, Iringa; 2 pregnancies, 2 children)

Several women referred to the status and respect women gain as mothers. As Sofia stated, “To be called Mama is respect” (IDI 527, age 26; *baa*, Ilula; 2 pregnancies, 0 children).

Naiwa, a mother of three, elaborated:

When you are called Mama, it is great praise. To be called Mama So-and-So is high respect. And when you are called Mama So-and-So, you are confident: “I am a woman who is completed [*mwanamke niliyekamilika*].” (IDI 508, age 28; *baa*, Mafinga; 3 pregnancies, 3 children)

In contrast, infertility is highly stigmatized in Tanzania, and FSWs are not exempt from internalized social pressure to bear children. Patricia (IDI 524, age 26; *baa*, Ilula; 0 pregnancies) actively sought but had never experienced pregnancy despite using no form of birth control in her multiple years as a sex worker. This made her “feel very bad.” The power of this stigma is demonstrated in the case of Shida. She reported not wanting any children, but when she became pregnant by clients she was happy. Bearing two children, both of whom she sent to live with their fathers, helped her avoid the stigma of being called childless. She felt “simply great” about having borne children with clients:

Is it not so that I won't be called childless [*mgumba*]?... That it not be said, “This girl doesn't reproduce, she's a prostitute [*malaya*] but she doesn't reproduce?!” That is something I should not like. (IDI 512, age 28; *kilabu*, Iringa; 5 pregnancies, 2 children)

“I Just Decided That I Should Have a Child with Him”: **Strategic Childbearing with Clients**—Regular clients also motivated FSWs to become pregnant, claiming they want to raise children with the sex workers or solidify their relationships. FSWs sometimes saw bearing clients' children as a route to relationships and financial security. They gambled that the father might go from client to long-term partner and breadwinner.² FSWs had heard of this happening to others, as Sofia related:

Yes, they decide [to get pregnant with clients].. [It is] her agreement with her client, that “I want things to be thus and thus.” A small number of them agree. They bear [a child]. In the end they have their houses and they stop this work. (IDI 527, age 26; *baa*, Ilula; 2 pregnancies, 0 children)

²The distinction between client and partner could be unclear, according to these data. In general, a client pays for each individual sexual encounter, while a partner provides resources in a more generalized way, and probably (but not necessarily) has a romantic attachment as well.

One woman did “settle down” [*kutulia*] to raise her child with a partner, but in this case it was only temporary. After the partner died from a sudden illness, she again began to support herself and the child through sex work.

Really he was able to change me. He said, “Truly, I know you are a prostitute [malaya], but [life’s] problems made you do this so I want you to settle down.” So I bore a child, I settled down with him here in Iringa, and I had a good life. But ... he passed away. (IDI 514, age 33; *kilabu*, Iringa; 2 pregnancies, 1 child).

Other women did not seek pregnancy as a way to leave sex work but rather to gain or secure attention from a particular client. Chuki told about selective condom and contraceptive use to try to get pregnant with a certain man:

I try very hard to use condoms, but for right now ... for example, this man with whom I had a child when I was [working] at the bar. We spent a lot of time together at the beginning, and I was using the injections [Depo Provera] and condoms. But after he said, “Right now, me and you, we want to be together.” We stopped using *salama* [condoms]. We continued to have sex without, we went just so [*hivi hivi*, e.g., skin-to-skin]. Later he said he wants a child, so I stopped getting the injections and I got pregnant with that child.. He’s a married man, but I just decided that I should have a child with him because he cares about me to a certain degree and helps my family.. He cares about my family and he said he wants a family with me. (IDI 517, age 38; *kilabu* and *baa*, Makambako; 3 pregnancies, 3 children)

Such strategic childbearing did not always turn out well for the women, however. Several women talked about men deceiving them into thinking they would be permanent partners and sources of income, only to deny paternity and leave them pregnant and alone. One woman said:

There are some [who intend pregnancy], yes, like if a person has deceived you [kudanganya]. One week, two weeks, he gives you money.. Yes, you bear him a child.. He has deceived us. We have borne children like this, and the men don’t care about us anymore. (FGD 545, Participant 1, Makambako)

This was a troubling occurrence for women who were “deceived” in this manner. When asked about such an experience, Sofia related:

The day that I will never forget in my life is the day we planned, we discussed with each other, that I should get pregnant, and then later he turned away from me. That’s a shock that affects me very much in my heart. I will not forget it. (IDI 527, age 26; *baa*, Iringa; 2 pregnancies, 0 children)

Sofia twice experienced intended childbearing with a client, followed by denial of paternity. Both times she thought she had found a man she could settle down with, only to be left with a pregnancy she had to care for alone. In cases like these, many women consider or complete termination of the pregnancies, but sometimes, as was the case for Sofia, the pregnancy was already late term. Both times, she bore and lost premature infants. Not wanting to reach old age without a family to care for her, she attempted a third time to find a man with whom to start a family, but was rejected as “just a prostitute.”

The three women who disclosed that they were HIV-positive related various pregnancy experiences and potential associated health risks. Serafina had a regular client who wanted her to become pregnant, though she refused to do so and used birth control but not condoms (IDI 518, age 28; *baa*, Makambako; 3 pregnancies, 2 children). Mlamka had recently had a child with a regular client, was breastfeeding, and was not receiving antiretroviral therapy (ART); although she believed the father infected her with HIV, she continued to see him (IDI 519, age 30; *kilabu*, Iringa; 4 pregnancies, 3 children). Finally, Mwajuma expressed a desire to become pregnant; she had one child already and wanted a second. Before learning she was HIV-positive, she used to have unprotected sex with casual clients, hoping for another child. One of her regular clients, a married man, visited her a couple of times a month, and they did not use condoms or any other form of birth control. Because they were both HIV-positive and on ART, she did not see any problem having unprotected sex with him. She worried that she was destined to have only one child but nevertheless hoped for another (IDI 520, age 34; *kilabu*, Iringa; 1 pregnancy, 1 child).

Experiences with Antenatal Care Services

No clinic-based services specifically for FSWs were available in Iringa and Njombe. However, FSWs, like other women, reported seeking health care, including general outpatient care, treatment for STIs, family planning, PMTCT, other HIV-related services, and ANC, which should include opt-out HIV testing according to national guidelines (TMoHSW 2012). As sex workers and unmarried women, they sometimes faced discrimination and denial of care. Many of them also had developed strategies to surmount these obstacles to ANC services.

“They Think Straight Away You Are Infected”: Stigma against Sex Workers—

Women reported purposely dressing “with respect” and “like a mother” in loose clothing and wraparounds when they attended the clinic, so that they could appear to be “regular women.” When they did so, women said they were accepted and treated “like other women” at health centers. Sofia related:

They [FSWs] are treated like regular people. The hospital cannot know that I work in a particular business, they cannot know until I explain that, “Yes, I do a certain business.” (IDI 527, age 26; *baa*, Iringa; 2 pregnancies, 0 children)

Women dressed this way because they feared health care workers would automatically assume sex workers were HIV-positive and refer them directly to care and treatment centers, rather than provide them with ANC or determine whether they required any other health services. One woman explained:

Straight away they direct you to the HIV [treatment clinic].... Over there, they do not give you any services at all other than AIDS tests [e.g., CD4 count] and [ART] medications. They think straight away you are infected.” (FGD 546, Participant 5, Ilula)

Beatrice likewise reported that sex workers at the ANC clinic were “separated out” from others.

Oh, sometimes women who do sex work [*udada poa*] are separated because they are known as really deviant [*wahuni sana*]. When it comes to the virus, it's easy for it to penetrate [*kupenya*] for them, yes. (IDI 530, age 31; multiple sites, Ilula; 2 pregnancies, 3 children)

She used the word *kutenga*, which is translated as “to separate” or “to isolate” but is commonly used to describe experiences that NGO workers refer to as stigma and discrimination. According to these women, they were treated differently if they revealed that they were sex workers (*dada poa*) and were immediately and exclusively associated with HIV/AIDS. This was despite the fact they were pregnant and had obvious other health care needs beyond HIV care and treatment, including PMTCT.

“Do You Have a Husband?”: Discrimination against Unmarried Women—In addition to the stigma and discrimination they potentially faced as sex workers, women reported being refused services during pregnancy, including HIV testing, if they did not bring their husbands to the ANC clinic. A woman explained:

These days, you cannot carry a pregnancy with the father not around, because if you are pregnant and go to the clinic they do not test you [for HIV]. They don't give you an [ANC] card until they see the father, so they can test you and the father. (FGD 545, Participant 1, Makambako)

Sofia stated that this difficulty led some FSWs to avoid ANC services completely, delaying care-seeking until they were in labor. According to her, this led to substandard care and stigmatization:

Since these days the clinic does not enroll you without your husband when you go to be issued an [ANC] card ... sometimes, you have to be open [*wazi*] at the hospital. If you are open, you are enrolled. But if you hide [your occupation], you cannot be enrolled.. You will wait until you are in labor pains, and then you will be enrolled. Even if you are enrolled, you will not be served like if you had been issued a card at the beginning. That is, you will be stigmatized a certain amount because you were not open from the beginning. If you are open, you will receive all services. (IDI 527, age 26; *baa*, Iringa; 2 pregnancies, 0 children)

A woman from another town also reported discrimination at the ANC clinic:

You will not be accepted like a woman who came with her husband. Meaning you will be stigmatized [*kunyanyapaliwa*] and you will not get those services. Not until you deliver. (FGD 546, Participant 3, Ilula)

Some women attempted to deceive health care workers about their nonexistent husbands, so they could get care. As Johanna recalled:

In the past there was no asking about your husband and what not. You just gave your name and your husband's name, that's all. 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 is 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 do not test just anyone [*ovyoyo ovyoyo*, carelessly]. (IDI 523, age 28; *kilabu*, Makambako; 3 pregnancies, 2 children)

In contrast, some FSWs found that they received full ANC services if they were open about being “barmaids” (*baamedi*, rather than *dada poa*), who were assumed to be unmarried and to have multiple partners. One explained:

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 that you should come with your husband so you can both get services. Thus, we open up completely, saying, “I am a barmaid.” A lot of us use the term “barmaid” because a large percentage of barmaids are seen to have no husbands at all, so they are always getting pregnant. When we are enrolled, we are tested and everything, and we continue on in care until delivery. (FGD 546, Participant 5, Ilula)

This reported denial of care or substandard care for sex workers and/or unmarried women was also highlighted in an announcement posted in some health centers in the area, which explicitly stated that women would not be provided with services if they did not bring their husbands to the ANC clinic. As translated from Swahili, the sign read: “Notice: All pregnant women are supposed to come with their husbands/partners at their first visit. You will not be given services without implementing this.”³

DISCUSSION

This study highlights several critical aspects of female sex workers’ social experiences with pregnancy and access to health services that are important to consider in the context of reproductive health and HIV programs. Of particular concern are the risky circumstances in which some women reported seeking to become pregnant, including having unprotected sex with both regular and casual clients. Especially concerning is the finding that FSWs reported substandard care and denial of care at ANC clinics, both because they were sex workers and because they were not married. All of these circumstances have health implications for the women, their pregnancies, and their partners and clients.

For these women, as for Tanzanian women in general, to be called “Mama” is a sign of respectability and “complete womanhood” (Allen 2002; Haram 2003). Pregnancy is also a way to avoid the stigma of infertility, which is strong in Tanzania (Kielmann 1998; Hollos and Larsen 2008). Haram (2003) described similar strategies among single, “modern” women in northern Tanzania of achieving respectability through childbearing. The women in this study achieved some level of respectability as mothers, which helped to overcome the stigma they faced as sex workers (Beckham et al. 2014).

Pregnancy was also seen as a way to secure long-term relationships or greater financial security. A life-history approach to understanding the circumstances of FSWs in the Dominican Republic found that women sometimes sought pregnancy to secure relationships (Murray and MODEMU 2002). This process illustrates an argument that Guyer made about

³In Swahili, it read: *Tangazo: Wajawazito wote mnatakiwa kuja na mume/mwenzi wenu katika hudhurio la kwanza. Hutapewa huduma bila kutekeleza hili.*

West African “polyandrous motherhood.” Guyer argued that one “logic” of reproduction is that children expand parents’ social networks. Through their children, women can make claims to inheritance, property, and social capital, even long after the sexual relationship with the father ends (Guyer 1994). The women in our study may have been engaging in this kind of process whereby childbearing with multiple men was a potentially advantageous strategy.

At the time of this study, there were neither clinical services nor national guidelines in Tanzania for health care workers to meet the specific medical needs of FSWs. This meant that health care workers were unable to tailor services, such as risk-reduction counseling, pre-conception counseling, family planning, ANC, PMTCT, and STI and violence screening, to FSWs’ circumstances. Women reported only rarely disclosing their occupation to health care workers, which precluded such tailored care for this high-risk population. This hesitancy on the part of FSWs was likely due to societal stigma against sex workers and the criminalized status of sex work.

When FSWs did access services, they faced barriers, as has been reported elsewhere in Tanzania and sub-Saharan Africa (Human Rights Watch and WASO 2013; Scorgie et al. 2013). The four “prongs” of PMTCT (preventing infection in women of childbearing age; preventing unwanted pregnancy in HIV-positive women; preventing mother-to-child transmission; and ensuring the long-term health of both mother and child) (UNICEF 2012) are particularly important for FSWs, who are at higher risk of HIV and unwanted pregnancy, and who face greater barriers to care (Scorgie et al. 2013). However, this four-prong model, as well as efforts to integrate HIV and reproductive health care (Kennedy et al. 2010), need to be adapted and tailored for FSWs. The difficulties FSWs reported in accessing ANC care in this study highlight the need to ensure equitable access to these and other services.

Furthermore, reproductive health programs could better tailor their services to include women who are not married, who may have multiple partners, and who are seeking to become pregnant. For example, Tanzania’s current family planning services (in practice, if not necessarily in policy) target married, monogamous women who have had at least one child, and educational messages are based largely on teaching women how to convince their husbands to accept use of long-term family planning methods (Beckham et al. 2013b). Additionally, programs for FSWs could help them develop skills to discuss health risks with their clients and could include integrated family planning services. These programs could promote a wider variety of methods, such as short-term barrier methods that could be used with some partners but not others with whom they would like to have children.

Women in this study reported facing significant barriers to ANC services; without husbands, some women were denied enrollment into ANC services and HIV testing. According to participants, this requirement for a husband was new. It was likely a result of the policy of the Ministry of Health and Social Welfare of provider-initiated opt-out testing for all pregnant women, which includes guidelines to encourage—but not require—an accompanying partner (TMoHSW 2012). When presented with this information, regional officials were alarmed that the policy had been misinterpreted in this way at individual health facilities.

This focus on male involvement in ANC may be a result of the international effort to include men in reproductive health care, particularly in the form of “couples HIV testing and counseling” (CHTC) services. The WHO’s guidelines on CHTC state that ANC services “present the most immediate and obvious opportunity for integration of CHTC” (WHO 2012). There is sound reasoning behind this effort, such as including men in discussions about sexual and reproductive health, dealing with gender power inequities that make women unwilling or unable to consent to HIV testing without their husbands’ approval, and reducing potential violence between couples (WHO 2006 and 2012). Evidence for the health benefits of couples-oriented services also exists (Aluisio et al. 2011). However, evidence for the effectiveness of male involvement in PMTCT programs is scant (Brusamento et al. 2012; Auvinen, Kylma, and Suominen 2013), and research in East Africa shows male resistance to this couples-oriented model (Siu, Wight, and Seeley 2014).

Although it was not the intent of couples HIV testing and counseling in ANC to deny testing to anyone, our study of FSWs’ experiences uncovered this alarming occurrence in more than one district. This same barrier may apply to adolescent girls, as well as to divorced women and widows, who are often economically and socially vulnerable and have higher HIV prevalence than other women in Tanzania (25 percent among widows and 15 percent among divorced/separated women versus 5 percent in married women) (TACAIDS et al. 2013). In the future, guidelines should be clarified to address this issue, and practitioners should be sensitized to the specific circumstances in which couples care is or is not appropriate.

This study had limitations. The data collection was limited to five towns in two regions, and women’s experiences at other ANC clinics might differ depending on the attitudes of health care workers. However, stigma against FSWs has been documented throughout East Africa (Scorgie et al. 2013). Because our research included only one village (Kilolo), we cannot comment on differences between rural and urban areas, which may especially affect experiences with health services. The cross-sectional nature of this study limited our ability to follow women’s pregnancy experiences over time, such as changes in fertility expectations (Hayford 2009). However, the quotes presented here represent a variety of reasons why female sex workers intend to get pregnant, providing insight into complex dynamics that need not be limited to current intentions. The cross-sectional data also did not allow for time to build rapport with our respondents, which can ameliorate issues such as social desirability bias. However, the interviewer was highly trained and has a degree in counseling, which helped women be open and comfortable in sharing information about stigmatized behaviors. Another limitation is that the sample included only a small number of women who had never had children, and only three who disclosed they were HIV-positive, limiting the ability to compare differences between these subgroups. Further research could specifically target these groups.

Another limitation of this study is that experiences with ANC care were self-reported by the women, and no observations were made to ascertain interaction with health care workers. Observations in clinics and/or interviews with providers would provide greater insights. Additionally, the data collection used an iterative approach to interviewing, meaning some questions were adapted and added over time and were thus not asked of all participants.

CONCLUSIONS

Recent research examines pregnancy prevention among female sex workers, but FSWs also seek and desire pregnancy, sometimes in ways that increase their risk of infection. Thus, their reproductive health needs extend beyond contraception. Reproductive health services, including but not limited to ANC and PMTCT, must be tailored to fit FSWs' unique contexts. The health system could benefit from sensitization training for health care workers and national guidelines for health care services for FSWs. Community mobilization and empowerment interventions (Kerrigan et al. 2013) can reduce stigma and increase women's willingness to disclose their occupation to health care workers and to demand their rights to health care and other services.

ACKNOWLEDGMENTS

This work was supported by various funds from the Johns Hopkins Bloomberg School of Public Health as well as from USAID Project SEARCH, Task Order No. 2, funded by the US Agency for International Development under Contract No. GHH-I-00-07-00032-00 and supported by the President's Emergency Plan for AIDS Relief. The authors acknowledge Haneefa Saleem and Justin Beckham for their input on drafts of the manuscript.

REFERENCES

- Aho J, Koushik A, and Rashed S. 2013 "Reasons for inconsistent condom use among female sex workers: Need for integrated reproductive and prevention services," *World Health and Population* 14(3): 5–13.
- Allen DR 2002 *Managing Motherhood, Managing Risk: Fertility and Danger in West Central Tanzania*. Ann Arbor: University of Michigan Press.
- A Luisio A, Richardson BA, Bosire R, John-Stewart G, Mbori-Ngacha D, and Farquhar C. 2011 "Male antenatal attendance and HIV testing are associated with decreased infant HIV infection and increased HIV-free survival," *Journal of Acquired Immune Deficiency Syndromes* 56(1): 76–82. [PubMed: 21084999]
- Ao TT-H, Sam N, Kiwelu I, et al. 2011 "Risk factors of alcohol problem drinking among female bar/hotel workers in Moshi, Tanzania: A multi-level analysis," *AIDS and Behavior* 15(2): 330–339. [PubMed: 21082340]
- Auvinen J, Kylma J, and Suominen T. 2013 "Male involvement and prevention of mother-to-child transmission of HIV in sub-Saharan Africa: An integrative review," *Current HIV Research* 11(2): 169–177. [PubMed: 23432492]
- Baral Stefan D., Beyrer Chris, Muessig Katherine, et al. 2012 "Burden of HIV among female sex workers in low-income and middle-income countries: A systematic review and meta-analysis," *The Lancet Infectious Diseases* 12(7): 538–549. [PubMed: 22424777]
- Becker M, Ramanaiik S, Halli S, et al. 2012 "The intersection between sex work and reproductive health in Northern Karnataka, India: Identifying gaps and opportunities in the context of HIV prevention," *AIDS Research and Treatment* 2012: 842576.
- Beckham Sarah W., Kennedy Caitlin E., Brahmhatt Heena, and Kerrigan Deanna L.. 2013a "Strategic Assessment to Define a Comprehensive Response to HIV/AIDS in Iringa, Tanzania. Research Brief: Female Sex Workers." Baltimore, MD: USAID | Project Search: Research to Prevention www.jhsph.edu/research/centers-and-institutes/research-to-prevention/publications/iringa/Iringa-FSW-brief-final.pdf. Accessed 10 Jan 2014.
- Beckham Sarah W., Shembilu Catherine R., Brahmhatt Heena, Winch Peter J., Beyrer Chris, and Kerrigan Deanna L.. 2013b "Female sex workers' motivations for family planning use and experiences with services in Iringa, Tanzania: A qualitative study." Paper presented at the Tanzania National Family Planning Conference, Dar es Salaam, 9–11 October

- Beckham Sarah W., Shembilu Catherine R., Winch Peter J., Beyrer Chris, and Kerrigan Deanna L.. 2014 “If you have children, you have responsibilities: Motherhood, sex work and HIV in southern Tanzania,” *Culture, Health and Sexuality* 17(2): 165–179.
- Bene C and Merten S. 2008 “Women and fish-for-sex: Transactional sex, HIV/AIDS and gender in African fisheries,” *World Development* 36(5): 875–899.
- Brusamento S, Ghanotakis E, Tudor Car L, van-Velthoven MH, Majeed A, and Car J. 2012 “Male involvement for increasing the effectiveness of prevention of mother-to-child HIV transmission (PMTCT) programmes,” *Cochrane Database of Systematic Reviews (Online)* 10: CD009468.
- Chacham AS, Diniz SG, Maia MB, Galati AF, and Mirim LA. 2007 “Sexual and reproductive health needs of sex workers: Two feminist projects in Brazil,” *Reproductive Health Matters* 15(29): 108–118. [PubMed: 17512382]
- Charmaz Kathy. 2006 *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. London: Sage Publications.
- Chege MN, Kabiru EW, Mbithi JN, and Bwayo JJ. 2002 “Childcare practices of commercial sex workers,” *East African Medical Journal* 79(7): 382–389. [PubMed: 12638835]
- Decker MR, McCauley HL, Phuengsamran D, Janyam S and Silverman JG. 2011 “Sex trafficking, sexual risk, sexually transmitted infection and reproductive health among female sex workers in Thailand,” *Journal of Epidemiology and Community Health*: 65(4): 334–339. [PubMed: 20515895]
- Decker Michele R., Yam Eileen A., Wirtz Andrea L., et al. 2013 “Induced abortion, contraceptive use, and dual protection among female sex workers in Moscow, Russia,” *International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics* 120(1): 27–31.
- Desmond N, Allen CF, Clift S, et al. 2005 “A typology of groups at risk of HIV/STI in a gold mining town in northwestern Tanzania,” *Social Science and Medicine* 60(8): 1739–1749. [PubMed: 15686806]
- Elmore-Meegan M, Conroy RM, and Agala CB. 2004 “Sex workers in Kenya, numbers of clients and associated risks: An exploratory survey,” *Reproductive Health Matters* 12(23): 50–57. [PubMed: 15242210]
- Feldblum PJ, Nasution MD, Hoke TH, et al. 2007 “Pregnancy among sex workers participating in a condom intervention trial highlights the need for dual protection,” *Contraception* 76(2): 105–110. [PubMed: 17656179]
- Gray RH, Li X, Kigozi G, et al. 2005 “Increased risk of incident HIV during pregnancy in Rakai, Uganda: A prospective study,” *The Lancet* 366(9492): 1182–1188.
- Grubb Ian R., Beckham Sarah W., Kazatchkine Michel, et al. 2014 “Maximizing the benefits of antiretroviral therapy for key affected populations,” *Journal of the International AIDS Society* 17: 19320. [PubMed: 25043380]
- Guest G, Bunce A, and Johnson L. 2006 “How many interviews are enough? An experiment with data saturation and variability,” *Field Methods* 18(1): 59–82.
- Guyer J 1994 “Lineal identities and lateral networks: The logic of polyandrous motherhood,” in Bledsoe CH and Pison G (eds.), *Nuptiality in sub-Saharan Africa: Contemporary Anthropological and Demographic Perspectives*. Oxford University Press, pp. 231–252.
- Haram L 2003 “Prostitutes or modern women? Negotiating respectability in northern Tanzania,” in Arnfred S (ed.), *Re-thinking sexualities in Africa*. Uppsala: Nordic Africa Institute, pp. 211–229.
- Harcourt C and Donovan B. 2005 “The many faces of sex work,” *Sexually Transmitted Infections*: 81(3): 201–206. [PubMed: 15923285]
- Hayford SR 2009 “The evolution of fertility expectations over the life course,” *Demography*: 46(4): 765–783. [PubMed: 20084828]
- Hollos M and Larsen U. 2008 “Motherhood in sub-Saharan Africa: The social consequences of infertility in an urban population in northern Tanzania,” *Culture, Health and Sexuality* 10(2): 159–173.
- Human Rights Watch and WASO. 2013 “‘Treat us like human beings’: Discrimination against sex workers, sexual and gender minorities, and people who use drugs in Tanzania.” New York: Human Rights Watch www.hrw.org/reports/2013/06/18/treat-us-human-beings-0. Accessed 19 June 2013.

- Ivanoff SD and Hultberg J. 2006 "Understanding the multiple realities of everyday life: Basic assumptions in focusgroup methodology," *Scandinavian Journal of Occupational Therapy* 13(2): 125–132. [PubMed: 16856469]
- Kennedy CE, Spaulding AB, Brickley DB, et al. 2010 "Linking sexual and reproductive health and HIV interventions: A systematic review," *Journal of the International AIDS Society* 13: 26. [PubMed: 20642843]
- Kerrigan D, Ellen JM, Moreno L, et al. 2003 "Environmental-structural factors significantly associated with consistent condom use among female sex workers in the Dominican Republic," *AIDS* 17(3): 415–423. [PubMed: 12556696]
- Kerrigan DL, Fonner VA, Stromdahl S, and Kennedy CE. 2013 "Community empowerment among female sex workers is an effective HIV prevention intervention: A systematic review of the peer-reviewed evidence from low- and middle-income countries," *AIDS and Behavior* 17(6): 1926–1940. [PubMed: 23539185]
- Kielmann K 1998 "Barren ground: Contesting identities of infertile women in Pemba, Tanzania," in Lock M and Kaufert PA (eds.), *Pragmatic Women and Body Politics*. Cambridge University Press, pp. 127–163.
- Li N, Matchi E, Spiegelman D, et al. 2014 "Maternal mortality among HIV-infected pregnant women in Tanzania," *Acta Obstetrica et Gynecologica Scandinavica* 93(5): 463–468. [PubMed: 24617748]
- Lieve VDP, Shafer LA, Mayanja BN, Whitworth JAG, and Grosskurth H. 2007 "Effect of pregnancy on HIV disease progression and survival among women in rural Uganda," *Tropical Medicine and International Health* 12(8): 920–928. [PubMed: 17697086]
- Morgan DL 1997 *Focus Groups as Qualitative Research*, 2nd edition. Thousand Oaks, CA: Sage Publications.
- Mugo NR, Heffron R, Donnell D, et al. 2011 "Increased risk of HIV-1 transmission in pregnancy: A prospective study among African HIV-1-serodiscordant couples," *AIDS* 25(15): 1887–1895. [PubMed: 21785321]
- Murray L and MODEMU. 2002 *Laughing on the Outside, Crying on the Inside*, 2nd edition. Santo Domingo, Dominican Republic: Movimiento de Mujeres Unidas (MODEMU).
- Murray L, Moreno L, Rosario S, Ellen J, Sweat M, and Kerrigan D. 2007 "The role of relationship intimacy in consistent condom use among female sex workers and their regular paying partners in the Dominican Republic," *AIDS and Behavior* 11(3): 463–470. [PubMed: 17096198]
- National Bureau of Statistics (NBS). 2011 *Tanzania Demographic and Health Survey 2010*. Dar es Salaam: National Bureau of Statistics.
- Ngugi EN, Roth E, Mastin T, Nderitu MG, and Yasmin S. 2012 "Female sex workers in Africa: Epidemiology overview, data gaps, ways forward," *SAHARA J: Journal of Social Aspects of HIV/AIDS Research Alliance / SAHARA, Human Sciences Research Council* 9(3): 148–153.
- Pruss-Ustun A, Wolf J, Driscoll T, Degenhardt L, Neira M, and Calleja JMG. 2013 "HIV due to female sex work: Regional and global estimates," *PloS One* 8(5): e63476. [PubMed: 23717432]
- Scheibe A, Drame FM, and Shannon K. 2012 "HIV prevention among female sex workers in Africa," *SAHARA J: Journal of Social Aspects of HIV/AIDS Research Alliance / SAHARA, Human Sciences Research Council* 9(3): 167–172.
- Scorgie F, Nakato D, Harper E, et al. 2013 "'We are despised in the hospitals': Sex workers' experiences of accessing health care in four African countries," *Culture, Health and Sexuality* 15(4): 450–465.
- Shagi C, Vallely A, Kasindi S, et al. 2008 "A model for community representation and participation in HIV prevention trials among women who engage in transactional sex in Africa," *AIDS Care* 20(9): 1039–1049. [PubMed: 18825513]
- Silberschmidt M and Rasch V. 2001 "Adolescent girls, illegal abortions and 'sugar-daddies' in Dar es Salaam: Vulnerable victims and active social agents," *Social Science and Medicine* 52(12): 1815–1826. [PubMed: 11352408]
- Siu GE, Seeley J, and Wight D. 2013 "Dividuality, masculine respectability and reputation: How masculinity affects men's uptake of HIV treatment in rural eastern Uganda," *Social Science and Medicine* 89: 45–52. [PubMed: 23726215]

- Tanzania Commission for AIDS (TACAIDS), Zanzibar AIDS Commission (ZAC), National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF International. 2013. Tanzania HIV/AIDS and Malaria Indicator Survey 2011–12. Dar es Salaam: TACAIDS, ZAC, NBS, OCGS, and ICF International.
- Tanzania Ministry of Health and Social Welfare (TMOHSW). 2012 Tanzania National Guidelines for Comprehensive Care of PMTCT Services, 3rd edition. Dar es Salaam.
- Todd CS, Nasir A, Raza Stanekzai M, et al. 2010 “Contraceptive utilization and pregnancy termination among female sex workers in Afghanistan,” *Journal of Women’s Health* 19(11): 2057–2062.
- UNICEF. 2012 “Preventing mother-to-child transmission (PMTCT) of HIV.” Geneva. www.unicef.org/esaro/5482_pmtct.html. Accessed 25 September 2014.
- Vallely A, Hambleton IR, Kasindi S, et al. 2010 “Are women who work in bars, guesthouses and similar facilities a suitable study population for vaginal microbicide trials in Africa?” *PloS One* 5(5): e10661. [PubMed: 20498833]
- Wahab E and Sloan L, 2004 “Ethical dilemmas in sex work research,” *Research for Sex Work*: 3–6.
- Wamoyi J, Fenwick A, Urassa M, Zaba B, and Stones W. 2011 “‘Women’s bodies are shops’: Beliefs about transactional sex and implications for understanding gender power and HIV prevention in Tanzania,” *Archives of Sexual Behavior* 40(1): 5–15. [PubMed: 20652390]
- Wayal S, Cowan F, Warner P, Copas A, Mabey D, and Shahmanesh M, 2011 “Contraceptive practices, sexual and reproductive health needs of HIV-positive and negative female sex workers in Goa, India,” *Sexually Transmitted Infections* 87(1): 58–64. [PubMed: 20980465]
- World Health Organization (WHO). 2006 “Addressing violence against women in HIV testing and counseling.” WHO Meeting Report, 16–18 January Geneva http://www.who.int/gender/documents/VCT_addressing_violence.pdf Accessed 15 May 2013.
- World Health Organization (WHO). 2012 “Guidance on couples HIV testing and counseling including antiretroviral therapy for treatment and prevention in serodiscordant couples: Recommendations for a public health approach.” Geneva. www.who.int/hiv/pub/guidelines/9789241501972/en/. Accessed 15 May 2013.

TABLE 1

Demographic characteristics, venue type, and location of female sex workers in five towns and villages in southern Tanzania (n = 30)

Characteristic	n	Percent
Age		
20–24	8	26.7
25–29	10	33.3
30–34	7	23.3
35–40	5	16.7
Education		
None	2	6.7
Primary	23	76.7
Some secondary	5	16.7
Marital status		
Never married	17	56.7
Divorced/separated	10	33.3
Widowed	3	10.0
Venue type		
<i>Baa</i> (large bar)	7	23.3
<i>Kilabu</i> (bar with local brew)	14	46.7
<i>Grosari</i> (small bar)	1	3.3
Truck stop	1	3.3
Multiple sites	7	23.3
Town (district, region)		
Iringa (Iringa Urban, Iringa)	12	40.0
Ilula (Kilolo, Iringa)	9	30.0
Mafinga (Mafinga Urban, Iringa)	3	10.0
Kilolo (Kilolo, Iringa)	1	3.3
Makambako (Makambako, Njombe)	5	16.7

NOTE: Percentages may not sum to 100 due to rounding.

TABLE 2

Reproductive histories of female sex workers, five towns and villages in southern Tanzania (n = 30)

Characteristic	n	Percent	Mean	Median
Lifetime pregnancies			2.6	2
0	1	3.3		
1	4	13.3		
2	12	40.0		
3	7	23.3		
4	3	10.0		
5+	3	10.0		
Live births			1.9	2
0	1	3.3		
1	10	33.3		
2	12	40.0		
3+	7	23.3		
Living children			1.7	2
0	3	10.0		
1	9	30.0		
2	12	40.0		
3	6	20.0		

NOTE: Percentages may not total 100 due to rounding.

TABLE 3

Reported paternity of pregnancies of female sex workers, five towns and villages in southern Tanzania (n = 77)

Timing/relationship type	Percent
Prior to sex work	
Husband/cohabiting partner/boyfriend	36.4
Casual, non-sex-work partner	6.5
Nonconsensual partner (rape)	2.6
During sex work	
Regular client	23.4
Casual client	28.6
Unknown	2.6

NOTE: Percentages may not total 100 due to rounding.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript