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Characterizing the relationship between migration and stigma affecting healthcare engagement among female sex workers in Lomé, Togo

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Abstract

Migration in West Africa is common and complicates the sustained delivery of comprehensive HIV care programs for those with specific vulnerabilities to HIV, including female sex workers (FSW). This study evaluated whether migration potentiates the burden of stigma affecting FSW in Lomé, Togo. Respondent driven sampling identified 354 FSW who completed HIV testing and a questionnaire. Multivariable logistic regression was used to identify factors associated with stigma among FSW. Among study participants, 76.3% (270/354) were migrants, with 30.2% (107/354) reporting stigma. Migrant FSW were less likely to report stigma (aOR 0.40; 95% CI:0.22–0.73). FSW who had an abortion (aOR 3.40; 95% CI:1.79–6.30) and were tested for a sexually transmitted infection (STI) or HIV (aOR 2.03; 95% CI:1.16–3.55) were more likely to report stigma. Among FSW, 59.8% (211/353) disclosed selling sex to a health worker. Disclosure was more common among FSW who had been tested for an STI or HIV (36.7%; 77/210), or both (55.7%; 117/210), and resulted in an attenuated but significant association between STI or HIV testing and stigma, indicating that disclosure partially mediated the relationship. These results

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Disclosures

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Availability of data and materials

The dataset analyzed by the current study is available from the corresponding author on reasonable request.

highlight the need to mitigate healthcare-related stigma affecting FSW, while also considering decentralized HIV testing approaches, including HIV self-testing.

Keywords

stigma; healthcare engagement; female sex workers; HIV; migration; Togo

Introduction

Migration has received increasing attention in the public health field, highlighting numerous associated risks and consequences for health outcomes (Gushulak & MacPherson, 2006). Across Africa, migration patterns are primarily intracontinental in search of greater economic opportunities (Kirwin & Anderson, 2018). While there is limited research on the drivers of migration in countries across West Africa, key reported drivers include population pressure, poverty, endemic conflict, and climate change (Adepoju, 2003; Kirwin & Anderson, 2018). Notably, there is ten times more migration across countries within West Africa than there is migration to Europe (UNHCR, 2008). Evidence reveals migration and population mobility are key factors in the global epidemiology of HIV (Gushulak & MacPherson, 2006). In addition to relocation challenges, migrants have been found to experience numerous barriers to accessing healthcare, including restricted access to prevention services (Scorgie et al., 2012). A high prevalence of stigma toward migrants is shown where data are available, rendering migrant populations vulnerable to health risks, including HIV and HIV-related outcomes (Reed, Gupta, Biradavolu, & Blankenship, 2012; Scorgie et al., 2012).

In West Africa, migration is prevalent, especially among female sex workers (FSW) (Ahoyo et al., 2006; Papworth et al., 2013; Platt et al., 2012; Scorgie et al., 2012; Udoh, Mantell, Sandfort, & Eighmy, 2009). Generally, the global migration flows of sex workers are similar to those of labor migrants (NWSP, 2017). A systematic review of demographic characteristics and risk behaviors among FSW in West Africa reported more than half of FSW are migrants to the country in which they currently live (Scorgie et al., 2012). In Togo, one study found that approximately 20% to 40% of sex workers are migrants from Ghana and Nigeria (NWSP, 2017). Furthermore, evidence suggests FSW frequently migrate to escape stigmatization from their communities, seek increased economic capital, and follow other migrant FSW (Chandrasekaran et al., 2006; Reed et al., 2012; Saggurti et al., 2008). However, in transitioning to new environments individuals may experience vulnerabilities due to migrant status, (Loff & Sanghera, 2004) social and cultural adjustments, or insecure social networks (Pyett & Warr, 1997; Reed et al., 2012).

Overall, FSW bear a disproportionate burden of HIV compared to the broader population. In sub-Saharan Africa (SSA), another systematic review reported the pooled HIV prevalence among FSW to be 36.9%, which stands in contrast to the background prevalence of 7.4% among all women on the continent (Baral et al., 2012; Papworth et al., 2013). In many settings FSW have substantial unmet health needs, particularly regarding basic health services and HIV care, which has consequences for HIV acquisition and transmission (Baral

et al., 2012; Chakrapani, Newman, Shunmugam, Kurian, & Dubrow, 2009; Rosenheck, Ngilangwa, Manongi, & Kapiga, 2010; Scorgie, Nakato, et al., 2013; UNAIDS, 2008). At the health facility level stigma is prevalent among FSW, including reporting disrespectful treatment and derogatory comments by healthcare providers; discriminatory attitudes of clinic staff towards sex workers and individuals living with HIV; and assumptions that FSW living with HIV are positive because they sell sex (Beattie et al., 2012; Phrasisombath, Thomsen, Sychareun, & Faxelid, 2012; Scorgie, Nakato, et al., 2013; Veldhuijzen et al., 2013). Studies have reported these experiences are among the greatest barriers to careseeking among FSW, resulting in delayed engagement in treatment (Beattie et al., 2012; Veldhuijzen et al., 2013). Given the stigma associated with disclosing sex work, disclosure may hinder accessing appropriate care. A study among sex workers in Kenya, Zimbabwe, Uganda and South Africa revealed most sex workers interviewed chose not to disclose their engagement in sex work to health workers, as disclosure frequently results in unnecessary interrogation and confidentiality breaches (Scorgie, Nakato, et al., 2013).

Recently, studies from various settings have investigated the relationship between migration and HIV among key populations, including FSW (Platt et al., 2012; Reed et al., 2012; Saggurti et al., 2008). FSW who are migrants in SSA have been found to have increased HIV risks compared to non-migrant FSW (McCarthy et al., 2009; Platt et al., 2012; Richter et al., 2014; Scorgie et al., 2012). A study among FSW in South Africa found international migrants had lower healthcare engagement and less condom use than non-migrant FSW (Richter et al., 2014). Another study in South Africa noted that migrant FSW face greater barriers in accessing HIV information, antiretroviral treatment, and condoms, especially when new to an area as they may be denied care by providers due to their status as foreign nationals (McCarthy et al., 2009; Scorgie et al., 2012). Barriers to health services may be intensified among migrant FSW, who likely face additional economic, political, and social hardship (Platt et al., 2012; Reed et al., 2012; Scorgie et al., 2012). Moreover, intersectional stigma, or the dynamic interaction of multiple stigmatized identities within a person or group, may be associated with migration among FSW (Bowleg, 2012). Despite this, limited research has investigated migration and HIV risk among FSW in West Africa (Ahoyo et al., 2006; Papworth et al., 2013; Platt et al., 2012; Richter et al., 2014; Scorgie et al., 2012; Udoh et al., 2009).

In Togo, the practice of sex work is both partially legal and criminalized, where selling sex is legal, and buying or soliciting sex is illegal (“Code pénal du Togo (révisé en avril 2000),” 2000; Papworth et al., 2014). These legal barriers coupled with negative social norms regarding sex work position FSW to experience stigma from family, friends, and the structural environment, resulting in social marginalization (Beattie et al., 2012; Papworth et al., 2013; Papworth et al., 2014). Such stigmatizing experiences may act as risk factors or barriers to careseeking that intensify FSW vulnerability to HIV-related outcomes and restrict access to HIV prevention and treatment services (Baral et al., 2012; Chesney & Smith, 1999; Giordano et al., 2007; Otutubikey Izugbara, 2005; Papworth et al., 2013; Papworth et al., 2014; Quinn et al., 2000; Scorgie, Vasey, et al., 2013; Steward, Bharat, Ramakrishna, Heylen, & Ekstrand, 2013). Stigma may be enacted, that is, experienced by FSW, or it may be anticipated though it has not actually happened yet, or perceived. Nonetheless any of these types of stigma may potentially influence careseeking behaviors.

In Togo, a country with a concentrated HIV epidemic among FSW, research is needed to understand healthcare management and barriers to careseeking among FSW to improve access and uptake of HIV prevention, care and treatment services and improve health outcomes (Baral et al., 2012). The relationship between migration and barriers to careseeking necessitates investigation in order to deliver services to a particularly vulnerable population among FSW. This paper explores associations between migration and stigma as a barrier to healthcare engagement among FSW in Lomé, Togo. Characterizing and understanding these relationships can help provide needed evidence to direct future research and interventions to reduce barriers to careseeking and promote uptake of health services among key populations.

Materials and Methods

Participant recruitment and procedures

Data were collected between January and July 2013, from 354 FSW living in Lomé, Togo. Participants were recruited via respondent driven sampling (RDS), a recognized peer referral sampling method for hidden or concealed populations (Heckathorn, 1997). Recruitment began with five initial seeds who were provided with three coupons to recruit peer FSW into the study. Women recruited by seeds and enrolled in the study were provided with three coupons for continued recruitment of peers. This process was repeated until reaching the target sample size of 350.

Eligibility criteria included: (1) 18 years old or older; (2) sold sex within the past three months; (3) able to provide informed consent in French, Ewe, or Kabiye; (4) willing to complete a survey and biological testing for HIV and syphilis; (5) lived in Togo for at least the past three months; and (6) possessed a valid recruitment coupon (except seeds). Each participant gave verbal informed consent. Following consent, participants completed an interviewer-administered socio-behavioral structured questionnaire covering six modules: socio-demographic characteristics, stigma and human rights violations, behavioral HIV risk factors, mental health, social cohesion, and sexual and reproductive health (Papworth et al., 2014).

Pre-and post-test HIV counseling, following Togolese national guidelines, was conducted for all participants. Venous blood samples were collected from each consenting participant by a phlebotomist or nurse. Individuals who screened positive for HIV were referred to a pre-identified healthcare center.

All participants were reimbursed for transportation costs and received an additional monetary amount per peer recruited to the study. Male condoms and HIV prevention and educational materials were distributed to all participants.

The National Ethics Committee of Togo, and the Johns Hopkins Bloomberg School of Public Health Institutional Review Board approved the study.

Measures

The primary outcome was anticipated, perceived, or enacted stigma relating to the healthcare setting. The dependent variable was created from two categorical questions measuring anticipated stigma, one categorical question measuring perceived stigma, and three categorical questions measuring enacted stigma. The final outcome variable of stigma was coded as 1 if the participant answered yes for any of the questions and 0 otherwise.

Anticipated stigma was measured using the following questions: (1) have you ever felt afraid to go to healthcare services because you worry that someone may learn you sell sex?; and (2) have you ever avoided going to healthcare services because you worry someone may learn you sell sex?.

Perceived stigma was measured using the following question: (1) have you ever felt that you were not treated well in a health center because you sell sex?.

Enacted stigma was measured using the following questions: (1) have you ever heard healthcare providers gossiping about you because you sell sex?; (2) have you ever been denied health services (or someone kept you from receiving health services) because you sell sex?; and (3) have you ever had difficulties in accessing (physically, financially or socially) healthcare services because you sell sex?.

The exposure of interest, migration, was measured as a binary variable identifying if the FSW moved to Togo from another country, moved from a rural environment to the urban national capital, Lomé, or moved to more than one city in the last 12 months. Migration was coded as 1 if the participant answered yes for any of the questions and 0 otherwise. Additional independent variables were selected based on their correlations with the dependent variable stigma, and migration, including: age, educational attainment, income, years selling sex, age of initiation of selling sex, number of living parents, living arrangement, marital status, number of children, having friends over in their home in the last 12 months (as an indicator of social support), number of friends who sell sex, fear of walking in public, abortion history, sexually transmitted infection (STI) and HIV testing in the last 12 months, HIV prevalence, and disclosure of selling sex to a health worker. Abortion history was categorized to include women who have never been pregnant, women who have been pregnant but never had an abortion, and women who have had an abortion.

Statistical analyses

Data analysis using Stata Version 13 (StataCorp, College Station, Texas, USA) was conducted to examine variable frequencies and to assess missing and unusual values (StataCorp, 2013). Missing values for categorical variables were assigned modally. Demographic, migration, and sex work characteristics were calculated and reported in crude numbers and percentages (Tables 1 & 2). Bivariate logistic regressions and chi-squared tests were used to examine unadjusted associations between each independent variable and stigma (Tables 1 & 3). Multivariable logistic regression was conducted to determine adjusted associations between the covariates and the outcome. A separate multivariable linear regression was conducted to assess collinearity using the variance inflation factor, which was below 2.0. Variables were included in the multivariable logistic regression if they were

statistically significant in bivariate analyses at the $p < 0.05$ level. A post-hoc mediation analysis was conducted to explore indirect pathways linking STI or HIV testing with stigma (Table 4). The potential mediator, disclosure of sex work to a health worker, was chosen based on the assumption that disclosure may exert indirect influences on stigma and was statistically significant ($p < 0.05$ across all models). Associations were evaluated using chi-squared tests.

Results

Study population

In this sample 76.3% (270/354) of participants were migrants, including 46.3% (164/354) rural-urban migrants, 33.3% (118/354) international migrants, and 39.0% (138/354) who moved to more than one city in the last 12 months (Table 1). Of women who were international migrants, 61.9% (73/118) migrated for economic reasons. Most women in this sample, 70.9% (251/354) had completed elementary school-level education or more. A third of the women in the sample, 34.2% (121/354), reported their total income was from sex work. Half of the women were single or never married (50.7%, 179/353). More than three quarters (78.5%, 278/354) of participants had biological children, and 39.1% (138/353) of FSW reported both parents were living.

The analysis of previous interactions with sexual and reproductive healthcare services showed 44.1% (154/349) tested for either an STI or HIV in the last 12 months, 39.3% (137/349) had been tested for both an STI and HIV in the last 12 months, and 16.6% (58/349) were not tested for an STI or HIV in the last 12 months. The self-reported HIV prevalence was 7.8% (19/243). Over one quarter (27.1%, 96/354) tested positive for HIV in the study. One third of participants had never been pregnant (33.0%, 116/351), while 44.4% (156/351) had been pregnant but never had an abortion, and 22.5% (79/351) had an abortion. Over half, 59.8% (211/353) of all participants reported a healthcare worker knew she sold sex, either through voluntary or involuntary disclosure.

Characteristics associated with migration

Participants who were migrants were older in age at the time of the study, with 69.6% (188/270) 25 years old or older, compared to 52.4% (44/84) of non-migrant FSW (Table 2). Migrant FSW tended to enter sex work at older ages, with 55.0% (148/269) of migrants entering sex work at 22 years or older, and 38.1% (32/84) of non-migrant FSW. Fewer migrant FSW had completed some secondary school or more compared to non-migrant FSW (28.5%, 77/270 and 42.9%, 36/84, respectively). Migrant FSW were significantly more likely to never have friends over in their house 30.7% (83/270), compared to 19.0% (16/84) of non-migrant FSW.

While the reporting of STI and or HIV testing did not differ significantly between migrant and non-migrant women, overall, migrant women were more likely to test for STIs and HIV (40.4%, 108/267) compared to non-migrant women (35.4%, 29/82). While migrant FSW had higher STI testing in the last 12 months (50.2%, 135/269 vs. 41.7%, 35/84 among non-migrants), they had lower HIV testing than non-migrant FSW (73.5%, 197/268 and 76.8%,

63/82, respectively). The self-reported HIV prevalence was greater among migrant FSW, at 9.7% (18/185) compared to 1.7% (1/58) for non-migrant FSW. However, HIV prevalence in the biological test results did not significantly differ between migrant and non-migrant FSW. Non-migrant FSW were significantly more likely to have never been pregnant than migrant FSW (40.5%, 34/84 and 30.7%, 82/267, respectively), but were also significantly more likely to have had an abortion compared to migrant FSW (28.6%, 24/84 and 20.6%, 55/267, respectively). Disclosure of involvement in sex work to health workers was greater among migrant FSW than non-migrant FSW (62.8%, 169/269 and 50.0%, 42/84, respectively).

Overall, 5.9% (16/270) and 4.8% (13/270) of migrant women were afraid to or avoided seeking care, respectively, and 4.8% (4/84) and 3.6% (3/84) for non-migrant women. Perceived stigma results showed 1.9% (5/270) of migrant FSW and 1.2% (1/84) of non-migrant FSW felt treated poorly while seeking care. Migrant FSW were less likely to experience enacted stigma than non-migrant FSW (20.0%, 54/270 and 41.7%, 35/84, respectively, $p < 0.001$). Healthcare provider gossiping was experienced by 0.7% (2/270) of migrant FSW, whereas 3.6% (3/84) of non-migrant FSW experienced this. Migrant women also had reduced odds of experiencing difficulties accessing health services than non-migrant women (18.9%, 51/270 and 39.3%, 33/84, respectively, $p < 0.001$).

Stigma

Just under one third (30.2%, 107/354) of this sample had experienced any stigma. Table 3 shows the results of the bivariate and multivariable analyses. In the bivariate analyses, increased stigma was positively associated with age being 25–32 years (OR 2.18; 95% CI: 1.23–3.85), having an abortion (OR 3.55; 95% CI: 1.99–6.33), and being tested for an STI or HIV (OR 1.93; 95% CI: 1.14–3.25). Being a migrant (OR 0.48; 95% CI: 0.29–0.80), having completed some secondary school or more (OR 0.44; 95% CI: 0.24–0.81), and disclosing selling sex to a health worker (OR 0.25; 95% CI: 0.15–0.40) were associated with lower odds of stigma.

In the multivariable analysis, migrants were less likely to report stigma (aOR 0.40; 95% CI: 0.22–0.73). FSW with some secondary education or more had nearly 70% reduced odds of stigma than FSW who had completed less than primary school (aOR 0.33; 95% CI: 0.17–0.65). FSW who had an abortion had increased odds of stigma compared with those who never had an abortion (aOR 3.40; 95% CI: 1.79–6.30). Being tested for an STI or HIV was associated with increased odds of stigma, compared to FSW who were tested for both an STI and HIV (aOR 2.03; 95% CI: 1.16–3.55).

Disclosure of sex work to a health worker was a mediator of STI or HIV testing and stigma in the post-hoc mediation analyses (Table 4). Disclosure of sex work to a health worker was more common among those who had been tested for an STI or HIV, or both, and was negatively and significantly associated with stigma in both mediation models (final model: aOR 0.26; 95% CI: 0.16–0.42), while STI and HIV testing attenuated into non-significance.

Discussion

This cross-sectional study demonstrates the associations of stigma with migration, and interactions with access to healthcare services among FSW in Lomé, Togo. Characterizing the relationships between stigma, migration, access to and utilization of healthcare services, and disclosure of involvement in sex work is essential for informing the development of HIV prevention and treatment interventions addressing the needs of migrant and non-migrant FSW at the clinical, community, and structural levels.

Migration was consistently associated with decreased odds of stigma in the bivariate and multivariable analyses in this study. Migrant FSW in this sample reported less social support, greater disclosure of involvement in sex work to health workers, and fewer experiences of enacted stigma, including gossip and difficulties seeking care. While stigma is documented among FSW, this study suggests that increased mobility may reduce odds of stigma and odds of experiencing difficulty accessing services, thus, potentially increase the uptake of health and HIV services. Therefore, migrant FSW may feel they can better maintain confidentiality in health facilities, or be less fearful of seeing a client or someone they know and being identified as a sex worker (Aliou, Mahaman, Adamou, & Soumana, 2002). This finding stands in contrast to previous studies documenting increased vulnerabilities to HIV among migrant FSW (McCarthy et al., 2009; Phrasisombath et al., 2012; Richter, 2008; Vearey, Richter, Núñez, & Moyo, 2011). For example, Richter (2014) found that international migrant FSW in South Africa had considerably less engagement with health services and faced greater discrimination than non-migrant FSW, reflecting a fear of arrest due to irregular legal status and social and legal barriers to accessing care (Richter et al., 2014). Given the prevalence of migration within West Africa, migrant FSW in Togo may face fewer social and legal barriers to accessing services and less fear of stigma in a new clinical environment, which may help explain the observed protective nature of migration in our sample.

Consistent with previous studies, migrant FSW in this sample were older, older at sex work debut, had lower education, and fewer abortions (Khan et al., 2008; O'Connor, Berry, Rohrsheim, & Donovan, 1996; Reed et al., 2012; Richter et al., 2014). These findings suggest migrant FSW may represent a distinct population from non-migrant FSW. Moreover, within the context of sex work, migrants may view the maintenance of sexual and reproductive health as a necessity, or greater priority, as it enables increased economic opportunities through mobility and sex work.

At the clinical level, interactions with sexual and reproductive health services, including STI and HIV testing, and abortion were associated with stigma among FSW. These findings are consistent with studies documenting abortion and STI- and HIV- related stigma as barriers to accessing care among FSW (Bleek, 1981; Kumar, Hessini, & Mitchell, 2009; Mojapelo-Batka & Schoeman, 2003; Richter et al., 2014; Scorgie, Nakato, et al., 2013; Human Rights Watch, 2009). In 2006, abortion was legalized in Togo only in the cases of incest and rape. While the literature surrounding abortion in Togo is limited, studies from Ghana and South Africa suggest that unmarried women who seek an abortion may be labelled 'promiscuous,' possibly placing their future chance of marriage at risk, in addition to facing the dual

challenge of avoiding both the negative stigmas of birth out of wedlock and abortion (Bleek, 1981; Mojapelo-Batka & Schoeman, 2003). Unfortunately, this stigma may be further compounded among FSW, whose participation in sex work lies at the core of abortion and FSW-related stigma, likely amplifying transgressions of cultural norms regarding who, when, why and how to have sex (Bleek, 1981; Kumar et al., 2009).

STI testing in the bivariate analyses was associated with decreased odds of stigma, while testing for an STI or HIV in the multivariable model that did not adjust for disclosure was associated with increased odds of stigma. As such, FSW accessing health services may already be experiencing perceived stigma as a result of sex work and feel that HIV testing poses an additional and greater threat to inadvertent disclosure of sex work, and thus consequences of intersectional stigmas and discrimination. Valdiserri (2002) found individuals are more likely to access HIV testing services that they perceive to be nonjudgmental and nonthreatening, as well as responsive to individual needs (Valdiserri, 2002). The implementation of stigma mitigation policies at healthcare facilities, such as sensitivity trainings for health workers on respectful and non-judgmental care to address specific FSW healthcare needs may potentially improve the efficiency of HIV prevention strategies. Nonetheless, pervasive stigma and the criminalization of sex work likely contribute to fear of disclosure and stigma, ultimately impeding prevention and treatment strategies.

Overall disclosure of involvement in sex work to healthcare workers was moderate in this sample, suggesting many FSW in Togo seeking care may not be receiving appropriate healthcare services. Encouragingly, in our sample, disclosure of involvement in sex work was significantly associated with reduced odds of stigma in the bivariate and multivariable analyses, and STI or HIV testing was no longer significantly associated with stigma when adjusting for disclosure. These findings suggest disclosure can lead to better quality care and health outcomes. FSW may perceive stigma while seeking care as a result of hearing other FSWs stigmatizing experiences and discrimination following their disclosure of sex work, as has been reported in the literature (Phrasisombath et al., 2012; Scorgie, Nakato, et al., 2013). However, after adjusting for disclosure, STI or HIV testing was no longer significantly associated with stigma, further suggesting the impacts of perceived rather than enacted stigmas as driving the association between STI and HIV testing and stigma. Additionally, migrant FSW in our sample reported disclosure of sex work nearly 13% more than non-migrant FSW, also suggesting that migration may be protective against stigma particularly within the context of healthcare engagement and sex work disclosure. While it is not known whether the health workers this sample of FSW encountered were trained to work with stigmatized and vulnerable populations, sensitivity trainings for health workers to meet the needs of sex workers are warranted.

At the community and structural levels, in addition to interventions to increase clinical competence and sensitization, community-based interventions addressing stigma and facilitating uptake of services and healthcare management, as well as sex worker empowerment have been successful in similar low-income settings in India, Ivory Coast, Senegal, South Africa, and Thailand (Lyons et al., 2017; Pardasani, 2005). Among FSW in this sample who were scared to walk in public because they sell sex, about half had

experienced stigma. This may suggest structural factors and human rights abuses, such as insecure environments among FSW, may result in increased fear and avoidance of seeking healthcare because they sell sex. Moreover, the criminalization of sex work, including its complexities in Togo, has proven difficult to surmount, and may obstruct access to basic health services and improved work environments (Richter, 2008). Modeling by Shannon et al. (2015) estimates the decriminalization of sex work could avert 33–46% of HIV infections among sex workers and their clients over the next decade (Shannon et al., 2015). Such decriminalization would have reaching effects on safer work environments, violence, police harassment, and HIV transmission pathways (Beyrer et al., 2015). Organizations in Togo must work toward policies against social marginalization and discrimination against FSW if they strive to provide appropriate and necessary services to FSW and confront the HIV epidemic.

These findings should be viewed in light of several limitations. As a cross-sectional study, causality or the direction of associations cannot be assessed. Longitudinal and qualitative studies should be conducted to expand upon the results of this study. Moreover, the RDS sampling method employed by this study may introduce selection bias, as this method relies on FSW referrals for participant recruitment. However, the feasibility of a probability sampling frame is limited given the nature of this hard to reach and often hidden population. Self-report bias may also be present given the questionnaires were conducted face-to-face, and sensitive nature of questions. Researchers attempted to minimize social desirability bias by emphasizing confidentiality. Lastly, this study is limited by the binary characterization of migration, a complex phenomenon presenting measurement challenges. Despite these limitations, this study adds to the limited existing literature on migration and barriers to careseeking among FSW globally.

In Togo, migrant FSW reported lower levels of stigma, suggesting that migration may be a strategy to reduce or avoid stigmatization while engaging in health services. Promoting a continuum of uptake of HIV services and appropriate healthcare management is a crucial component in addressing the disproportionate burden of HIV faced by FSW, particularly migrant FSW. The findings presented in this study illustrate the need for continued healthcare serving FSW, in addition to structural reforms and interventions specifically addressing the needs of migrant FSW, stigma affecting FSW, and legal barriers to safe engagement in sex work. Despite the availability of HIV prevention, care and treatment services, uptake remains insufficient among both migrant and non-migrant FSW. To increase access to and utilization of health services, stigma at the structural and clinical levels must be addressed, in addition to considering decentralized HIV testing approaches, such as HIV-self testing.

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Table 1.

Characteristics of Female Sex Workers and Stigma Affecting Healthcare Engagement in Lomé, Togo

Characteristics	Sample (N=354)		Reported stigma (N=107/354; 30.2%)		p value
	n	%	n	%	
Migrant (rural-urban, international migrant or moved to more than 1 city in last 12 months)	270	76.3	71	26.3	0.004
Rural-urban migrant	164	46.3	48	29.3	0.715
Moved to more than 1 city in last 12 months	138	39.0	23	16.7	0.000
International migrant	118	33.3	31	26.3	0.244
Internationally migrated to make more money	73/118	61.9	18	24.7	0.612
Age (years)					0.026
18–24	122	34.5	27	22.1	--
25–32	115	32.5	44	38.3	0.007
33+	117	33.1	36	30.8	0.131
Education completed					0.025
Less than primary (or never attended)	103	29.1	39	37.9	--
Primary	138	39.0	44	31.9	0.334
Some secondary or more	113	31.9	24	21.2	0.008
Number of parents living					0.046
Both	138/353	39.1	31	22.5	--
Only one	147/353	41.6	51	34.7	0.023
Neither	68/353	19.3	24	35.3	0.052
Marital status					0.811
Single/never married	179/353	50.7	52	29.1	--
Married/co-habiting	26/353	7.4	10	38.5	0.331
Divorced/separated	106/353	30.0	32	30.2	0.839
Widowed	42/353	11.9	13	31.0	0.808
Living arrangement					0.168
Rent	210/348	60.3	68	32.4	--
Own	9/348	2.6	5	55.6	0.160
Staying with someone	42/348	12.1	11	26.2	0.056
Brothel	87/348	25.0	21	24.1	0.800
Has biological children	278	78.5	81	29.1	0.402
One or more children living in household	133/353	37.7	34	25.6	0.155
Abortion					<0.001
Never pregnant	116/351	33.0	30	25.9	0.510
Never had an abortion	156/351	44.4	35	22.4	--
Had an abortion	79/351	22.5	40	50.6	<0.001
Tested for an STI or HIV*					0.041
Not tested for an STI or HIV	58/349	16.6	19	32.8	0.110
Tested for an STI or HIV	154/349	44.1	54	35.1	0.010
Tested for both an STI and HIV	137/349	39.3	30	21.9	--

Characteristics	Sample (N=354)		Reported stigma (N=107/354; 30.2%)		
	n	%	n	%	p value
Tested for an STI in last 12 months	170/353	48.2	35	20.6	<0.001
Ever tested for HIV	260/350	74.3	80	30.8	0.350
Self-reported living with HIV	19/243	7.8	18	94.7	0.090
Living with HIV (study test results)	96	27.1	32	33.3	0.437
A health worker knows she sells sex	211/353	59.8	39	18.5	<0.001
Scared to walk in public due to selling sex	65	18.4	32	49.2	<0.001
Age at start of selling sex					0.045
10–15	33/353	9.3	7	21.2	--
16–21	140/353	39.7	36	25.7	0.591
22–27	83/353	23.5	35	42.2	0.038
28+	97/353	27.5	29	29.9	0.338
Total income is from sex work	121	34.2	33	27.3	0.383
Average weekly income from sex work					0.065
<10,000 CFA	74	20.9	31	41.9	--
10,000–15,999 CFA	124	35.0	38	30.6	0.110
16,000–21,999 CFA	64	18.1	16	25.0	0.038
22,000 CFA+	92	26.0	22	23.9	0.014
Number of friends who sell sex					0.277
0–3	103	29.1	25	24.3	--
4–6	114	32.2	34	29.8	0.359
7–10	69	19.5	22	31.9	0.273
11+	68	19.2	26	38.2	0.052
Had friends over at their home in last 12 months					0.354
Never	99	28.0	29	29.3	--
Sometimes	79	22.3	29	36.7	0.295
Often	176	49.7	49	27.8	0.798

* STI=sexually transmitted infection, HIV=human immunodeficiency virus

Table 2.

Associations Between Sex Work and Migration Characteristics of Female Sex Workers in Lomé, Togo

Characteristics	Non-migrant (n=84)		Migrant (n=270)		p value
	n	%	n	%	
Age (years)					0.009
18–24	40	47.6	82	30.4	--
25–32	25	29.8	90	33.3	0.058
33+	19	22.6	98	36.3	0.004
Education completed					0.029
Less than primary (or never attended)	17	20.2	86	31.9	--
Primary	31	36.9	107	39.6	0.253
Some secondary or more	36	42.9	77	28.5	0.010
Number of parents living					0.448
Both	34/83	41.0	104	38.5	--
Only one	37/83	44.6	110	40.7	0.917
Neither	12/83	14.5	56	20.7	0.259
Abortion					0.018
Never pregnant	34	40.5	82/267	30.7	0.014
Never had an abortion	26	31.0	130/267	48.7	--
Had an abortion	24	28.6	55/267	20.6	0.017
Tested for an STI or HIV*					0.614
Not tested for an STI or HIV	13/82	15.9	45/267	16.9	--
Tested for an STI or HIV	40/82	48.8	114/267	42.7	0.594
Tested for both an STI and HIV	29/82	35.4	108/267	40.4	0.847
Tested for an STI in last 12 months	35	41.7	135/269	50.2	0.173
Ever tested for HIV	63/82	76.8	197/268	73.5	0.547
Self-reported living with HIV	1/58	1.7	18/185	9.7	0.048
Living with HIV (study test results)	20	23.8	76	28.1	0.435
A health worker knows she sells sex	42	50.0	169/269	62.8	0.036
Scared to walk in public due to selling sex	16	19.0	49	18.1	0.852
Age at start of selling sex					0.039
10–15	10	11.9	23/269	8.6	--
16–21	42	50.0	98/269	36.4	0.973
22–27	18	21.4	65/269	24.2	0.330
28+	14	16.7	83/269	30.9	0.047
Average weekly income from sex work					0.100
<10,000 CFA	21	25.0	53	19.6	--
10,000–15,999 CFA	26	31.0	98	36.3	0.237
16,000–21,999 CFA	21	25.0	43	15.9	0.573
22,000 CFA+	16	19.0	76	28.1	0.093
Number of friends who sell sex					0.131
0–3	16	19.0	87	32.2	--

Characteristics	Non-migrant (n=84)		Migrant (n=270)		p value
	n	%	n	%	
4-6	29	34.5	85	31.5	0.075
7-10	19	22.6	50	18.5	0.058
11+	20	23.8	48	17.8	0.032
Had friends over at their home in last 12 months					0.033
Never	16	19.0	83	30.7	0.010
Sometimes	26	41.0	53	19.6	--
Often	42	50.0	134	50.0	0.132
Anticipated stigma					
Afraid	4	4.8	21	7.8	0.346
Avoid	4	4.8	16	5.9	0.681
Avoid	3	3.6	13	4.8	0.632
Enacted stigma					
Gossip	35	41.7	54	20.0	<0.001
Denied health care	3	3.6	2	0.7	0.055
Difficulties	1	1.2	1	0.4	0.381
Difficulties	33	39.3	51	18.9	<0.001
Perceived stigma					
Treated poorly	1	1.2	5	1.9	0.682

* STI=sexually transmitted infection, HIV=human immunodeficiency virus

Table 3.

Crude and Adjusted Odds of Stigma Affecting Healthcare Engagement among Female Sex Workers in Lomé, Togo

Characteristics	Crude OR of Stigma (N=354)			Adjusted OR of Stigma (N=348)		
	OR	95% CI	p value	aOR	95% CI	p value
Migrant (rural-urban, international migrant or moved to more than 1 city in last 12 months)	0.48	(0.29, 0.80)	0.004	0.40	(0.22, 0.73)	<0.001
Age (years)						
18–24	1.00 ^{ref}	--	--	1.00 ^{ref}	--	--
25–32	2.18	(1.23, 3.85)	0.007	1.85	(0.99, 3.47)	0.053
33+	1.56	(0.88, 2.79)	0.131	1.41	(0.74, 2.69)	0.296
Education completed						
Less than primary (or never attended)	1.00 ^{ref}	--	--	1.00 ^{ref}	--	--
Primary	0.77	(0.45, 1.31)	0.334	0.77	(0.43, 1.40)	0.398
Some secondary or more	0.44	(0.24, 0.81)	0.008	0.33	(0.17, 0.65)	0.002
Abortion						
Never pregnant	1.21	(0.69, 2.11)	0.510	1.34	(0.73, 2.43)	0.343
Never had an abortion	1.00 ^{ref}	--	--	1.00 ^{ref}	--	--
Had an abortion	3.55	(1.99, 6.33)	<0.001	3.40	(1.79, 6.30)	<0.001
Tested for an STI or HIV [*]						
Not tested for an STI or HIV	1.74	(0.88, 3.44)	0.110	1.64	(0.78, 2.43)	0.193
Tested for an STI or HIV	1.93	(1.14, 3.25)	0.010	2.03	(1.16, 3.55)	0.014
Tested for both an STI and HIV	1.0 ^{ref}	--	--	1.00 ^{ref}	--	--
A health worker knows she sells sex	0.25	(0.15, 0.40)	<0.001	--	--	--

*STI=sexually transmitted infection, HIV=human immunodeficiency virus

Table 4.

Exploratory Mediation of Associations of STI or HIV testing with Stigma by Disclosure of Sex Work to Health Workers

Independent Variable	Distribution of potential stigma mediator over independent variable				p value	Exploratory mediation models		
	Potential stigma mediator	Among exposed to STI* or HIV testing %	Among exposed to both STI and HIV testing %	Among unexposed to neither STI or HIV testing %		aOR [†] (95% CI)	aOR [‡] (95% CI)	
Tested for an STI or HIV	Disclosure of sex work to health worker	36.7	55.7	7.6	<0.001	Tested for an STI or HIV	1.88 (1.11, 3.20)	1.18 (0.66, 2.11)
						Disclosure of sex work to health worker	0.26 (0.16, 0.42)	0.27 (0.15, 0.46)

* STI=sexually transmitted infection, HIV=human immunodeficiency virus

[†] Model reflects stigma as a function of the independent variable, adjusted for migrant status

[‡] Model reflects stigma as a function of both independent variable and potential mediator, adjusted for migrant status.