HHS Public Access

Author manuscript

J Immigr Minor Health. Author manuscript; available in PMC 2020 April 22.

Published in final edited form as:

J Immigr Minor Health. 2017 October ; 19(5): 1235–1244. doi:10.1007/s10903-016-0399-x.

Exploring the context and implementation of public health regulations governing sex work: A qualitative study with migrant sex workers in Guatemala

Teresita Rocha Jiménez[a], **Kimberly C. Brouwer**[a], **Jay G. Silverman**[a], **Sonia Morales-Miranda**[b], **Shira M. Goldenberg**[a,c,d]

[a]Division of Global Public Health, University of California, 9500 Gilman Drive, La Jolla, CA, USA, 92093-0507

[b]Unidad de VIH/SIDA, Universidad del Valle de Guatemala, 18 Avenida 11-42, Zona 15, Vista Hermosa III Guatemala, Guatemala

[c]Faculty of Health Sciences, Simon Fraser University, Burnaby, Canada

[d]Gender & Sexual Health Initiative, British Columbia Centre for Excellence in HIV/AIDS, Department of Medicine, St. Paul's Hospital, University of British Columbia, Vancouver, Canada

Abstract

Public health regulations practices surrounding sex work and their enforcement can have unintended consequences for HIV and sexually transmitted infection (STI) prevention and care among sex workers. This analysis was based on qualitative in-depth (n=33) and focus groups interviews (n=20) conducted with migrant female sex workers in Tecún Umán and Quetzaltenango, Guatemala, and explored the implementation of sex work regulations and related consequences for HIV prevention and care among migrant sex workers. Sex work regulations were found to have health-related benefits (e.g., access to HIV/STI testing) as well as negative impacts, such as abuse by police and harassment, detention/deportation of migrant sex workers. Whereas public health regulations may improve access to HIV/STI testing, their implementation may inadvertently jeopardize sex workers' health through unintended negative consequences. Non-coercive, evidence-based public health and sex work policies and programs are needed that expand access to HIV/STI prevention and care among migrant sex workers, while protecting their dignity and human rights.

Keywords

sex work; public health regulations; Guatemala; migration

CORRESPONDING AUTHOR: Shira M. Goldenberg, [BC Centre for Excellence in HIV/AIDS, Department of Medicine, University of British Columbia, St. Paul's Hospital, 608-1081 Burrard St., Vancouver, BC, V6Z 1Y6, Canada **Ph:** (604) 682-2344 ext. 66268**; Fax:** (604) 806-9044; sgoldenberg@cfenet.ubc.ca].

BACKGROUND

Globally and in Central America, women who engage in sex work face high prevalence of HIV and sexually transmitted infections (STIs)(1–3). In Guatemala, HIV prevalence in the general population is 0.79%, and is considerably higher (4.5%) among female sex workers (FSWs)(2–4). Due its strategic geographical position between Mexico and the rest of Central America,(5–7) Guatemala is characterized by a significant population of internal(8, 9) and international migrants(10), among whom social and structural factors including mobility, gender-based inequalities, migration status, poverty, marginalization, and social exclusion have been linked to increased HIV risk(7, 11–14). However, limited evidence is available regarding other structural factors (i.e., public policies and public health regulations surrounding sex work) and their impacts on HIV risk among migrant FSWs.

As in many other settings, sex work in Guatemala is tolerated in certain venues under policies designed to protect public health. Until 2012, public health regulations in Guatemala mandated that sex workers must register, regularly undergo HIV/STI testing, and maintain a sanitary control card [*cartilla* or *libreto*] provided by municipal health clinics, and must demonstrate compliance at the request of authorities(15). These regulations were reformed in 2012, such that FSWs are no longer required to maintain a *cartilla*, but must continue periodical HIV/STI testing(16).

Although limited information is available regarding the health impacts of sex work regulations and health practices in Central America(10, 17), in some settings where similar policies exist (e.g., Tijuana, Mexico), FSWs report barriers to compliance with local sex work regulations (i.e., barriers to obtaining a health permit to engage in sex work)(18, 19).

Furthermore, sex work regulations have been critiqued for their punitive nature and potential to increase stigma and abuse of sex workers(20–22), which may be exacerbated among migrant FSWs. For example, migrant FSWs along the Mexico-Guatemala and Mexico-U.S. borders frequently experience heightened health and social vulnerabilities related to their immigration status, social isolation, and exposure to abuse by police and immigration authorities(23, 24).

In addition to individual behaviors and characteristics, structural influences such as sex work regulations(25, 26), interactions with authorities(27, 28), and venue-based characteristics(18, 29) can shape HIV/STI risk among FSWs. Whereas empirical research has demonstrated that female migrants are especially vulnerable to HIV/STIs(11, 30, 31), the ways in which public health practices surrounding sex work and related structural factors (e.g., police abuse) impact migrant FSWs' well-being remain poorly understood. As human rights concerns have been raised regarding how public health practices affect FSWs' well-being(32–34), we carried out this study to explore how the implementation of public health practices surrounding sex work (Regulation for the Control of Sexually Transmitted Diseases, Guatemala) shape HIV prevention and care among migrant FSWs in two Guatemalan communities that(5–7) are characterized by an important population of internal and international migrants(8, 10).

METHODS

Data were drawn from qualitative research carried out from May 2012-February 2014 (seven field visits) in the Guatemalan communities of Tecún Umán and Quetzaltenango. Both are characterized by the presence of mobile population (e.g. seasonal workers, international migrants)(35), large sex work scenes, and human right violations(36–38). Data collection included ethnographic fieldwork (i.e., field observations, informal conversations with key actors such as municipal clinic staff, police, local organizations) to gather rich contextual data on the implementation of public health regulations and interaction with authorities, as well as focus groups and in-depth interviews with 53 migrant FSWs.

The study was conducted in partnership with a local HIV prevention nongovernmental organization located in Tecún Úman, Guatemala (Asociación de Educación para la Vida, EDUCAVIDA). Input on study procedures, findings and dissemination was provided by a Community Advisory Board representing FSWs, municipal clinics, and HIV prevention and women's local organizations in both communities. This study was approved by Institutional Review Boards at the University of California, San Diego (UCSD), the Universidad del Valle de Guatemala (UVG), and the Guatemalan Ministry of Health and Social Assistance. Participants' participation to this study was completely voluntarily and aimed to protect FSWs confidentiality and privacy(39). It was informed to the participants that they could stop or terminate the session at any moment if they felt uncomfortable or tired(17, 40).

Participants' characteristics

Eligible participants for this analysis were females 18 ≥ years old who exchanged sex for money, drugs, or other resources in the last six months, could provide informed consent, spoke Spanish and had a history of internal or international migration. Women were purposively sampled to represent diversity in migration experiences, work environment (e.g., formal/informal venues) and age.

Table 1 summarizes the characteristics of participating FSWs. Participants were international migrants from El Salvador (n=10), Honduras (n=11), Nicaragua (n=4) and Mexico (n=2) or internal migrants from other Guatemalan communities (n=26). The average amount of time living in the interview site was four years. Despite almost all (50 out of 53) participants reported having at least one child, most of them were single (34 out of 53). Eight reported being married, 7 widowed, and 4 divorced. We interviewed 31 women who serviced clients exclusively in entertainment/formal venues (e.g., bars, nightclubs); six who worked in indoor informal venues (e.g., cantinas); and sixteen who were independent/mobile (e.g., servicing clients in hotels/motels, and in trucks). The majority (n=39) of women accessed HIV/STI testing at municipal clinics by maintaining a *cartilla*, whereas others reporting no access to testing (n=10) or accessing tests via their own providers (n=4).

Data collection

Data collection was led by researchers from UCSD (TR, SG) and staff from EDUCAVIDA. Both in-depth interviews and focus groups were conducted in EDUCAVIDA's field offices to ensure participants privacy and confidentiality. We also provided the opportunity to be

interviewed in the location where participants felt most comfortable (i.e., park, private room). This analysis included testimonies of 53 FSWs, of which 28 completed interviews as part of a study of migration and sex work(12) (November 2012-January 2014), which obtained information on sex work history, and interactions with authorities (Tecún Umán n=15 and Quetzaltenango n=13). We also analyzed the narratives of 25 migrant sex workers who completed interviews or focus groups as part of a study examining ethical issues related to sex workers' health and HIV research participation in Tecún Umán from June 2013-February 2014)(17); of these, n=5 women completed interviews, whereas n=20 participated in focus groups (n=7 groups, each of which was comprised of 3–4 participants).

Similar questions were asked across both studies, allowing us to examine broader structural issues such as immigration, health practices implementation and interaction with authorities (e.g., "Did you have any interactions with immigration authorities, police or health authorities? [Upon your arrival, during your migration journey]" "Have you been harassed, arrested, or abused by the police or migration authorities while at work?", "Can you tell us more about this?" Probes: "Did you have a health card when this happened?").

The same research (TR, SG) and outreach team (EDUCAVIDA) were involved in the collection of data across the two qualitative studies, and during the research and analytic process noted how similar evolving themes were emerging in both projects (i.e., FSWs' interactions with government authorities such as immigration, police). Interviews were appropriate for gaining insight into individual experiences and circumstances, and especially important for those who preferred to be interviewed privately; whereas focus groups were used to stimulate group discussion and collective insights(17, 41).

Therefore, this analysis drew on data from both projects to increase our analytic sample and enable us to achieve a better understanding of migrant female sex workers' experiences related to sex work non-regulatory practices, interaction with authorities(42, 43) and how these affect FSWs' health and access to HIV prevention and care. Recruitment for both projects involved discreetly inviting potential participants to the study during outreach to indoor and outdoor sex work venues led by our local community partner organization, EDUCAVIDA. Condom distribution and services information dissemination was part of these visits. Participants were selected using a purposive sampling scheme that aimed to capture a diversity of experiences and perspectives (e.g., international and internal migration patterns). In order to prompt thought and discussion and to explore relevant themes from the participant's perspective, the in-depth interviews and focus groups followed loosely structured guides (i.e., an interview script organized around relevant themes and prompts to provoke discussion) which were iteratively revised as data analysis and collection progressed(44, 45). Data collection also included recurrent ethnographic fieldwork, including visits to different sex work venues (e.g., bars, cantinas), and informal conversations with bar owners, police, local clinic personnel and other community members.

On average, interviews took one hour and focus groups lasted 1.5–2 hours they were all audio-recorded post receiving approval from the participants. Discussion topics included sex work and migration histories, interactions with authorities, violence, health concerns, health care access and working conditions(12, 46). Focus groups were conducted to facilitate group

discussion and insights regarding ethical considerations related to sex work, HIV prevention, and research participation (e.g., stigma)(46).

Data analysis

Interviews were transcribed verbatim and then translated by bilingual, trained staff. All transcripts and translations were accuracy-checked by the project coordinator (TR). Personal identifiers were removed and each participant was identified by a unique pseudonym. The de-identified transcripts were saved in an encrypted file in a secured server at UCSD. The software NVivo 9(47) managed coding. Interviews were coded (by SG, TR) using inductive techniques(48, 49) to identify major themes related to participants' experiences with public health practices, related interactions with authorities (e.g., police harassment), and HIV prevention and care. Once all the interviews were coded a selection of the most illustrative quotes was made to inform the analysis of this study. The research team maintained a detailed codebook; and audit trail to keep track of analytic decisions; as well as multiple team members involved in coding to ensure consensus of the analytic process.

In addition to the interview transcripts, we drew heavily on knowledge of local sex work regulations and their implementation 'on the ground' gained through fieldwork at the border. Fieldnotes pertaining to this topic were reviewed and incorporated into this analysis to provide deeper contextual information regarding public health regulations surrounding sex work and their intended and unintended consequences among migrant sex workers in indoor and outdoor venues. In order to verify the credibility and confirmability of this analysis, we conducted workshops sessions with a subset of study participants to gather women's feedback on preliminary findings and their interpretation (i.e., "member-checking"). This process enabled us to assess the extent to which the findings were perceived as credible and relevant to study participants and provided an opportunity to expand on key concepts in greater depth. Due they expertise and familiarity with the migration and sex work context in Guatemala, the field team (EDUCAVIDA) was also actively involved in the process of data analysis(41).

RESULTS

Overview of the implementation of public health regulations surrounding sex work

Of 53 participating FSWs, most (n=39) had a *cartilla* at the time of their interview. Despite official changes to public health regulations surrounding sex work at the federal level in 2012, local practices in terms of the implementation of the regulations appeared unchanged 'on the ground', with ongoing reliance on FSWs owning *cartillas* and inspections by health authorities and the police to enforce the regulations. The frequency of testing required or venues where the *cartilla* is enforced it is not clear (i.e., police has an important role in community in Tecún Umán). Therefore, we found that the implementation of these practices remains largely at the discretion of local authorities (i.e., health, police and immigration authorities). Within this context we found that there are potential benefits of maintaining a *cartilla* in terms of increased access to and frequency of HIV/STI testing; and unintended negative consequences and concerns expressed by sex workers regarding the *cartilla* system, including the fact that some FSWs prefer not to maintain a *cartilla* due privacy concerns,

concerns surrounding their migration status, or simply feel that it was not necessary or beneficial to them. Adolescent sex workers (<18 years of age) are excluded from the regulations and practices altogether.

Benefits and barriers of public health practices for access to HIV prevention and care

Despite not being officially required anymore, we learned during our fieldwork, including in-depth interviews with FSWs that a *cartilla* represents the main source of access to HIV/STI prevention and testing for migrant FSWs in these communities. Participants expressed many positive feelings towards having a *cartilla.* HIV/STI prevention was often described as the most important health-related benefit of maintaining a *cartilla* along with receiving sexual health information and free condoms. However, the decision to maintain a *cartilla* varied by work venue. Many women – particularly independent/mobile FSWs – preferred not to receive HIV/STI-related care at municipal clinics to avoid identifying as sex workers, and instead received testing privately. Other participants mentioned shame and fear that the information they shared at the clinic or their test results would not be kept confidential, which were powerful barriers to maintaining a *cartilla* and accessing HIV testing and care:

> Because of shame…There are women that…let's say that they think that this [test results] will [be] leaked.
>
> [Javiera, 30 years old, *truck stop-based FSW*]

Some women perceived that a *cartilla* was unnecessary for FSWs working in informal venues. For example, one participant previously had a *cartilla* and accessed services at municipal clinics as a bar-based FSW, but no longer did so as an independent/mobile worker:

> I don't go anymore [to the clinic], because I don't need to…now that I don't work in a bar, I go to a private doctor [HIV testing] every six months.
>
> [Karla, 43 years old, *hotel-based FSW*]

This quote indicates how some independent or mobile workers, such as Karla, preferred to access private services in order to receive HIV/STIs prevention and testing services. Interestingly, other sex workers (n=6) who worked in independent settings reported maintaining a *cartilla* and attending regular clinic visits, and often perceived this as important for their sexual health:

> I think owning a *cartilla* is something valuable, because with it I know if I'm healthy internally. I'm healthy externally, but internally…you never know…That's why I go [to the clinic].
>
> [Itzel, 31 years old, *hotel-based FSW*]

In addition to the positive perceived benefits and the nuances towards the *cartilla*, participants described migration-related barriers to compliance with public health practices surrounding sex work and, consequently, to HIV/STI testing access. For example, some migrants expressed discontent regarding municipal clinic rules that require women to provide valid ID to receive services:

> I went to Nicaragua and came back and the doctor didn't see me, because I got robbed and I didn't have any ID with me. I think that's wrong because I would like to know if I have an infection…
>
> [Marlen, 27 years old, *bar-based* FSW]

Testimonies such as Marlen's suggest that barriers to accessing HIV/STI prevention and testing services at municipal clinics, such as requirements for ID and registration as a sex worker, may be an important unintended consequence of the enforcement of the *cartilla* for migrant sex workers.

The role of authorities in the implementation of public health practices surrounding sex work

Police played a key role in the implementation of sex work regulations. While no longer established in publicly available regulations, in Tecún Umán, the police continued to supervise sex workers' periodical HIV/STI testing compliance along with health authorities and sometimes immigration authorities. During the study, FSWs described being required to visit the police station after each clinic visit to receive a stamp verifying their compliance, where written records are maintained with each registered worker's name, picture, workplace and date of most recent clinic visit. Through our fieldwork, we learned that police verification of sex workers' *cartilla* is established as a means of protecting public health and avoiding the trafficking of minors. In Quetzaltenango, FSWs are not required to verify their clinic visits with the police, although participants described circumstances in which the police, health authorities and sometimes immigration authorities requested their *cartilla* usually in the work place.

While no longer established in publicly available regulations, in Tecún Umán, the police continued to supervise sex workers' periodical HIV/STI testing compliance along with health authorities. During the study, FSWs working in Tecún Umán described being required to visit the police station after each clinic visit to receive a stamp verifying their compliance, where written records are maintained with each registered worker's name, picture, workplace and date of most recent clinic visit. Through our fieldwork, we learned that police verification of sex workers' *cartilla* is established as a means of protecting public health and avoiding the trafficking of minors. In Quetzaltenango, FSWs are not required to verify their clinic visits with the police, although participants described circumstances in which the police, health authorities, and sometimes immigration authorities requested their *cartilla* in their work place.

In Tecún Umán and Quetzaltenango, public health practices surrounding sex work were differentially enforced by police across work venues. In both communities, sex work in bars is typically tolerated among adult FSWs with a valid *cartilla*, whereas policing practices related to sex work in outdoor settings and informal venues such as *cantinas* appeared to be more subjective. Women working in cantinas often reported maintaining a *cartilla* to protect their health, but provided a false workplace name when receiving testing at municipal clinics or verifying their clinic visit with the police. Cantina-based FSWs explained that this could avoid sanctions against their employers and could provide some anonymity, while providing access to free HIV/STI care:

> We don't want to be identified as sex workers…so when we go to the health center we identify as women from another venue.
>
> [Floridalma, 38 years old, *cantina-based FSW*]
>
> We don't want the authorities to come after the bar owner, and we don't want them to identify us as sex workers…I get worried about this…so when we go to the clinic we give them a different name [bar name].
>
> [Girasol, 38 years old, *cantina-based FSW*]

Sex workers shared diverse perspectives regarding police involvement in the enforcement of these practices. Twenty-one of the FSWs interviewed in Tecún Umán regularly visited the police to have their *cartilla* stamped. Some of these women perceived that a stamp from the police could be useful in avoiding detention as a result of police or immigration raids at their workplace. For example, bar-based FSWs reported that a *cartilla* offered some protection from abuse and harassment by police and immigration authorities:

> I think it's good to have it [*cartilla*] because if the police come [to the bar], they can't arrest us because I present my *cartilla,* which is stamped by them [police and clinic].
>
> [Yolanda, 21 years old, *bar-based FSW*]

Among participants who did not receive police verification following their clinic visit, some mentioned a reluctance to do so out of fear that their family could find out where they were working. Some felt that police maintenance of sex worker records could be helpful in the case of missing women, whereas others questioned the requirement to receive a police stamp altogether, perceiving this process as unnecessary:

> I don't go over there [police]. I only go to the clinic, because I don't want my family to know… I think the others go because they are not from Guatemala; they are Hondurans, Salvadorans, so in case of death, people would able to find them, due to what [information] they [police] have.
>
> [María, 44 years old, *cantina-based FSW*]
>
> The only thing that I don't do is go to the police…if they ask for my *libreto* I show it to them, but I don't have their stamp…because I've heard that you don't need to go with them, and I've never had any trouble.
>
> [Nayeli, 22 years old, *bar-based FSW*]

Some migrants also reported fear of deportation as a reason for avoiding interactions with the police or immigration authorities within the context of maintaining a *cartilla.* As a young Salvadoran sex worker explained:

> I don't go to the police because I'm scared. I have my kids; I get scared because I think to myself, 'If I go to the police and they deport me, my kids will be left behind.'
>
> [Carmen, 26 years old, *cantina-based FSW*]

These concerns were rooted in participants' perceptions and experiences with the roles and authority of local police in immigration matters. For example, women frequently described police involvement in the deportation of sex workers, despite the lack of authority of police to do so:

> The police came to the bar and took all the foreigners that were there, they didn't ask for anything, not the clinic stamp or our documents. They just took us - it was the police, the National Police.
>
> [Claudia, 39 years old, *hotel-based FSW*]
>
> They [police] showed up at the business and they tore up her [peer's] passport, that's why I didn't give [them] my passport, just my *cartilla.*
>
> [Alejandra, 25 years old, *bar-based FSW*]

In contrast, some Central American migrants mentioned that despite not having work authorization in Guatemala, they did not have any problems with the police during their *cartilla* visits at the police station or were advised by the police to get their *cartilla,* rather than immigration-related consequences:

> I go with the police to stamp the *cartilla*, they only stamp it and that's it… they don't care if you are not from here [Guatemala]…they wouldn't deport me.
>
> [Victoria, 30 years old, *bar-based FSW*]

The different consequences that not maintaining a *cartilla* imply demonstrate the potentially subjective ways in which public health practices surrounding sex work are differentially enforced and affect migrant sex workers.

DISCUSSION

Unintended consequences of the public health regulations surrounding sex work

Migrant sex workers' testimonies highlighted access to HIV/STI testing as a key health-related benefit of public health practices surrounding sex work. However, the decision to maintain a *cartilla* was not always motivated by health considerations, but was often perceived as a means of avoiding police harassment and detention.

Our study noted a lack of consistency in the implementation of public health practices across work environments. As found by studies in Tijuana, Mexico(18, 50), FSWs in more visible establishments were more likely to describe compliance with public health practices surrounding sex work, as opposed to those working in outdoor or informal venues.

The role of the police in the implementation of public health regulations raises concerns regarding the use of public health policies as a basis for the arrest, harassment, and in the case of international migrants deportation of sex workers(51, 52). The unclear mandate of the police in implementing the regulations, as well as potential confusion between the authority of police versus immigration officials to detain and deport sex workers, can increase migrant FSWs' vulnerability to abuse and human rights violations(12), although this is the first study to systematically examine these concerns as they relate to the effects of

public health practices surrounding sex work among migrants in Guatemala(34, 53, 54). This was true for internal and international migrants FSWs working in Guatemala(55). Therefore, in order to have a comprehensive analysis of Guatemala sex work context in terms of public health regulations implementation, we included both population testimonies.

The role of the police in the enforcement of public health regulations likely represents a response to the lack of a comprehensive sex work legal framework, particularly one with relevance to border settings where sex work is frequently tolerated(56, 57). Although governmental provision of HIV/STI testing, prevention and care for FSWs continues to represent an important (and often the sole) source of access to such services, stigma, fear of sex work disclosure and the punitive climate surrounding service delivery under current practices (e.g., mandatory testing) continue to pose barriers to FSWs' well-being(52, 55). Furthermore, access to HIV prevention and care for sex workers in resource-poor settings such as Guatemala remains limited by structural barriers (i.e. stock-outs of tests, drugs and other supplies), which must be addressed in order to scale-up and improve access to HIV prevention and care for FSWs(58, 59).

This analysis brings into the discussion feminist theories regarding the influence of gendered norms (i.e., health card) on women's sexual experiences and decision-making and how this relates to sex work regulations (i.e., testing) as a form of institutionalized control over marginalized women's lives and health (i.e., risk of HIV/STIs transmission)(60–62). Likewise, the salience of structural factors (i.e., public health regulations surrounding sex work, migration) presented in this analysis elucidate the need for need for further research and policies that better contextualize sex workers' health and safety using critical social sciences perspectives, including relevant perspectives on gender and power, as well as sexual health and rights(51, 60, 63–65).

This study had several limitations. As a qualitative study, while the findings cannot be directly generalized to a wider population, the insights gathered offer an in-depth understanding of the impacts of public health regulations on FSWs' access to care and interactions with law enforcement(41). For ethical reasons, we only interviewed adult FSWs; given previous research suggesting heightened vulnerabilities of younger FSWs(66–68), future research is needed to investigate how sex work regulations impact younger FSWs' health and access to care, as well as non-migrant FSWs. Due the complexity and constant transformation of the sex work context in Guatemala, it is hard to assure dependability in related future researches. Future gendered-power theory-based research on sex work regulations and how these intersect with issues of autonomy, and public health considerations at a national and local level, including future work to further 'unpack' the ways in which public health regulations (i.e., mandatory HIV/STI testing) can represent a form of state control over sex workers' bodies and their health is needed(69–71).

Conclusions: Implications and possible interventions

The main conclusions of the study were that sex workers' perspectives indicated that maintaining a *cartilla* can have both benefits (e.g., facilitating access to regular HIV/STI testing) as well as drawbacks (e.g., cost, fear of interacting with authorities involved in its implementation and punitive legal or immigration consequences) of relevance to migrant

FSWs' engagement with HIV/STI testing. As current public health practices surrounding sex work may entail both positive and negative consequences, these should be carefully weighed in future public health and sex work policies(18, 20). The inconsistency between recently revised public regulations (2012) and their implementation can increase FSWs' vulnerability to abuse by authorities and should be addressed through structural reforms that consider international and internal migrants FSWs' realities(51, 52) and promote marginalized women's autonomy and right to health.

Interventions which place respect for migrant sex workers' autonomy human rights at the forefront remain critical, with substantial evidence noting that human rights-based approaches to sex work are aligned with public health goals, as such approaches have been shown to foster the most effective HIV/STI response in sex work(51, 52, 58, 69, 70). These interventions should consider FSWs input, opinions, and diverse experiences (i.e., migration) as well the participation of relevant actors (i.e., authorities, community) in order to achieve comprehensive public health practices to promote sex worker's health and access to care in Guatemala and elsewhere(52). Further research conducted in collaboration with sex workers is needed to identify ways of implementing evidence-based practices to expand safe and non-coercive and non-discriminatory access to prevention and care for sex workers(52, 70, 72).

ACKNOWLEDGMENTS

The authors wish to acknowledge staff from EDUCAVIDA, Universidad del Valle de Guatemala, and University of California, San Diego (UCSD), including Itzel Loya, Valerie Mercer and Alicia Vera. This research was funded by the UC Global Health Institute Center of Expertise on Migration and Health (COEMH), the UC Pacific Rim Research Program, and the Fordham University HIV Prevention Research Ethics Training Institute/National Institutes of Drug Abuse (R25DA031608-01; Director, Celia B. Fisher). SG receives support as a postdoctoral fellow from the Canadian Institutes of Health Research and the Michael Smith Foundation for Health Research/ Women's Health Research Initiative. TR was supported by Consejo Nacional de Ciencia y Tecnología (CONACYT, Mexico).

REFERENCES

1. Bastos FI, Caceres C, Galvao J, Veras MA, Castilho EA. AIDS in Latin America: Assessing the Current Status of the Epidemic and the Ongoing Response. Int J Epidemiol 2008; 37:729–37. [PubMed: 18653508]
2. Morison L The global epidemiology of HIV/AIDS. Oxford Journals. 2001; 58:7–18.
3. Baral S, Beyrer C, Muessig K, Poteat T, Wirtz AL, Decker MR, et al. Burden of HIV among female sex workers in low-income and middle-income countries: a systematic review and meta-analysis. The Lancet 2012; 12:538–49. [PubMed: 22424777]
4. UNAIDS. Informe Nacional sobre los Progresos en la lucha contra el VIH/SIDA2012.
5. Mahler SJ, Ugrina D. Central America: crossroads of the Americas. Migration Information Source 2006.
6. Vogt WA. Crossing Mexico: Structural violence and the commodification of undocumented Central American migrants. American Ethnologist. 2013; 40:764–80.
7. Bronfman M, Leyva R, Negroni M, Rueda C. Mobile populations and HIV/AIDS in Central America and Mexico: Research for Action. AIDS. 2002; 16:42–9.
8. Villafuerte Solís D, García Aguilar M. Migraciones en el sur de Mexico y Centroamerica: Miguel Angel Porrúa; 2008.
9. Campos-Delgado A, Odgers-Ortiz O. Crossing the Border: Mobility as a Resource in the Tijuana/San Diego and Tecún Umán/Tapachula Regions. Estudios Fronterizos. 2012; 13:9–32.

10. Morales-Miranda S, Hernández B, Caal M. Estimación del tamaño de poblaciones en mayor riesgo y vulnerabilidad al VIH: Hombres que tienen sexo con hombres y trabajadoras sexuales en seis ciudades de Guatemala. Universidad Del Valle de Guatemala 2010; 11.
11. Goldenberg S, Stathdee S, Perez-Rosales M, Sued O. Mobility and HIV in Central America and Mexico: A critical Review. Journal of Immigrant and Minority Health. 2012; 14:48–64. [PubMed: 21789558]
12. Rocha-Jiménez T, Brouwer CK, Silverman GJ, Morales Miranda S, Goldenberg MS. Migration, violence, and safety among migrant sex workers: A qualitative study in two Guatemalan communities Culture, Health and Sexuality. 2015; In Press.
13. Zimmerman C, Kiss L, Hossain M. Migration and health: a framework for 21st century policy-making. PLoS Med. 2011; 8:e1001034. [PubMed: 21629681]
14. Watts C, Zimmerman C. Violence against women: global scope and magnitude. The Lancet. 2002; 359:1232–7.
15. Ministerio de Salud Pública y Asistencia Social Guatemala. Reglamento para el Control de las Enfermedades de Transmisión Sexual. In: Salud DGdSd, editor. Guatemala: Departamento de Enfermedades Transmisibles; 2002.
16. Reglamento para la Prevención, Diagnóstico, Tratamiento y Control de las Infecciones de Transmisión Sexual (ITS) y el Virus de Inmunodeficiencia Humana (VIH), 57–2012 (2012).
17. Goldenberg SM, Rivera Mindt M, Rocha Jimenez T, Brouwer K, Morales Miranda S, Fisher CB. Structural and interpersonal benefits and risks of participation in HIV research: Perspectives of female sex workers in Guatemala. Ethics & Behavior. 2015; 25:97–114. [PubMed: 27840564]
18. Gaines LT, Rusch LAM, Brouwer CK, Goldenberg MS, Lozada R, Robertson MA, et al. Venue-level correlates of female sex worker registration status: A multilevel analysis of bars in Tijuana, Mexico. Global Public Health. 2013.
19. Goldenberg SM, Strathdee SA, Gallardo M, Nguyen L, Lozada R, Semple SJ, et al. How important are venue-based HIV risks among male clients of female sex workers? A mixed methods analysis of the risk environment in nightlife venues in Tijuana, Mexico. Health & place. 2011; 17:748–56. [PubMed: 21396875]
20. Sirotin N, Strathdee SA, Lozada R, Nguyen L, Gallardo M, Vera A, et al. A comparison of registered and unregistered female sex workers in Tijuana, Mexico. Public Health Reports. 2010; 125:101. [PubMed: 20626197]
21. Latin American and Carribean Women Sex Worker's Network. Statement about the regional situation of Sex Work. Guatemala City, Guatemala2011 [0ctober 3rd, 2013]; Available from: http://www.redtrasex.org/About-the-regional-situation-of.html.
22. Women for Justice E, and Awareness,. Gender-based violence campaign. Guatemala2012; Available from: http://mujerguatemala.org/our-campaigns/.
23. Goldenberg SM, Silverman JG, Engstrom D, Bojorquez-Chapela I, Strathdee SA. "Right Here is the Gateway": Mobility, Sex Work Entry and HIV Risk Along the Mexico–US Border. International Migration. 2013:1–16.
24. Rocha Jimenez T, Goldenberg MS, Paz-Bailey G, Silverman JG, Brouwer CK, Morales-Miranda S. Migration, Violence and Exploitation among Migrant Sex Workers among the Mexico-Guatemala border region: A Qualitative Study. Under review. 2013.
25. Sabsay L Citizenship in the Twilight Zone? Sex Work, the Regulation of Belonging and Sexual Democratization in Argentina. Beyond Citizenship?: Feminism and the Transformation of Belonging. 2013:160.
26. Urada LA, Goldenberg SM, Shannon K, Strathdee SA. Sexuality and sex work. 2014.
27. Shannon K, Kerr T, Strathdee AS, Shoveller J, Montaner JS, Tyndall MW. Prevalence and structural correlates of gender based violence among a prospective cohort of female sex workers. BMJ. 2009; 339.
28. Rhodes T, Simic M, Baros S, Platt L, Zikic B. Police violence and sexual risk among female and transvestite sex workers in Serbia: qualitative study. BMJ. 2008; 337:a811. [PubMed: 18667468]
29. Krusi A, Chettiar J, Ridgway A, Abbott J, Strathdee S, Shannon K. Negotiating Safety and Sexual Risk Reduction With Clients in Unsanctioned Safer Indoor Sex Work Environments: A Qualitative Study. Am J Public Health 2012; 102:1154–9. [PubMed: 22571708]

30. Bronfman M, Leyva R, Negroni M. Movilidad poblacional y VIH/SIDA Contextos de vulnerabilidad en México y Centroamérica. Cuernavaca, Morelos, México: Instituto Nacional de Salud Pública; 2004.
31. Bandyopadhyay M, Thomas J. Women migrant workers' vulnerability to HIV infection in Hong Kong. AIDS care. 2002; 14:509–21. [PubMed: 12204153]
32. Shannon K, Montaner JSG. The politics and policies of HIV prevention in sex work. Lancet. 2012; 12:500–2. [PubMed: 22424776]
33. Sukthankar A, editor. Sex Work, HIV and the Law. HIV and Law Comission; 2011: Working paper prepared for the Third Meeting.
34. Cuadra-Hernández SM, Leyva R, Hernandez-Rosete D, Bronfman M. The Regulation of STI/HIV/AIDS Control among Sex Workers in Two Cites Along the Southern Border of Mexico. Poblaciones Moviles y VIH/SIDA en Centroamerica, Mexico, y Estado Unidos. 2002.
35. Leyva R, Dreser A, Magali S, Hernández Rosete D, Bronfman M. Guatemala Tecun Uman. In: Bronfman M, Leyva R, Negroni M, editors. Movilidad poblacional y VIH/SIDA Contextos de vulnerabilidad en México y Centroamérica. Cuernavaca, Morelos, México: INS; 2004 p. 175–212.
36. Infante C, Aggleton P, Pridmore P. Forms and Determinants of Migration and HIV/AIDS-Related Stigma on the Mexican—Guatemalan Border. Qualitative Health Research. 2009; 19:1656–8. [PubMed: 19949216]
37. Infante C, Leyva R, Caballero M, Guerrero C, Cuadra S, Bronfman M. VIH/SIDA y rechazo a migrantes en contextos fronterizos. Migración y Desarrollo. 2004; 3:45–53.
38. Ogren C Migration and Human Rights on the Mexico-Guatemala Border. International Migration. 2007; 45:203–43.
39. World Health Organization. WHO Ethical and Safety Recommendations for Interviewing Trafficked Women. Geneva, Switzerland: World Health Organization2003.
40. Goldenberg SM, Rivera Mindt M, Rocha Jimenez T, Brouwer K, Morales Miranda S, Fisher C. Structural and Interpersonal Benefits and Risks of Participation in HIV Research: Perspectives of Female Sex Workers in Guatemala. Ethics & Behavior. 2014.
41. Trochim WM. Qualitative measures. 2006.
42. Barbour RS. Mixing qualitative methods: quality assurance or qualitative quagmire? Qualitative health research. 1998; 8:352–61. [PubMed: 10558336]
43. Guba EG, Lincoln YS. Competing paradigms in qualitative research Handbook of qualitative research. 1994; 2.
44. Taylor MC. Interviewing In: Holloway I, editor. Qualitative research in health care. New York, U.S: McGraw-Hill Education; 2005 p. 39–55.
45. Mason J Qualitative Researching. London, England: Sage; 2002.
46. Goldenberg MS. Female sex workers' perspectives on ethically relevant benefits and risks of participation in HIV research in Guatemala. Under review. 2014.
47. NVivo. [QSR International Pty Ltd] 2012; Version 10, 2012:[
48. Fetterman MD. Etnography. Step by Step. Series ASRM, editor. California, USA: SIAGE Publications; 1998.
49. Creswell WJ. Research Design Qualitative, Quantitative, and Mixed Methods Approaches. United States: SAGE Publications; 2003.
50. Strathdee SA, Magis-Rodriguez C, Mays VM, Jimenez R, Patterson TL. The emerging HIV epidemic on the Mexico-US border: an international case study characterizing the role of epidemiology in surveillance and response. Annals of epidemiology2012 p. 426–38. [PubMed: 22626001]
51. Decker MR, Crago A-L, Chu SK, Sherman SG, Seshu MS, Buthelezi K, et al. Human rights violations against sex workers: burden and effect on HIV. The Lancet. 2015; 385:186–99.
52. Organización de Mujeres en Superación. Estudio sobre la Incidencia y la Participación Política de las mujeres trabajadoras sexuales en Amércia Latina y el Caribe: Guatemala. Guatemala: RedTraSex Red de Mujeres Trabajadoras Sexuales de Latinoamerica y el Caribe; 2013.
53. Sabidó M, Giardina F, Hernández G, Fernández VH, Monzón JE, Ortiz R, et al. The UALE project: decline in the incidence of HIV and sexually transmitted infections and increase in the use of

condoms among sex workers in Guatemala. JAIDS Journal of Acquired Immune Deficiency Syndromes. 2009; 51:S35–S41. [PubMed: 19384099]

54. Morales-Miranda S, Álvarez-Rodríguez BE, Arambú N, Aguilar J, Huamán B, Figueroa W, et al. Encuesta Centroamericana de Vigilancia de Comportamiento Sexual y Prevalencia del VIH e ITS, en poblaciones vulnerables y poblaciones clave (ECVC). Guatemala: Universidad del Valle de Guatemala, MSPAS, HIVOS2013 Contract No.: 27.
55. Cuadra-Hernández MS, Leyva R, Hernández-Rosete D, Bronfman M. Los derechos humanos en las normas sobre el VIH/SIDA en México y Centroamérica. 1993–2000. Salud Pública México 2002; 44:508–16.
56. Strathdee SA, Lozada R, Martinez G, Vera A, Rusch M, Nguyen L, et al. Social and structural factors associated with HIV infection among female sex workers who inject drugs in the Mexico-US border region. PLoS One. 2011; 6:e19048. [PubMed: 21541349]
57. Beletsky L, Martinez G, Gaines T, Nguyen L, Lozada R, Rangel G, et al. Mexico's northern border conflict: collateral damage to health and human rights of vulnerable groups. Revista Panamericana de Salud Pública. 2012; 31:403–10. [PubMed: 22767041]
58. Morales-Miranda S, Jacobson JO, Loya-Montiel I, Mendizabal-Burastero R, Galindo-Arandi C, Flores C, et al. Scale-Up, Retention and HIV/STI Prevalence Trends among Female Sex Workers Attending VICITS Clinics in Guatemala. PLoS Medicine. 2014.
59. Organización Mujeres en Superación. OMES presentations of their findings about the attention offered to FSWs in the local health centers. Ciudad Guatemala, Guatemala: Red de Mujeres Trabajadoras Sexuales de Latinoameric y el Caribe; 2015 [cited 2015 12/30/2015]; Available from: http://www.redtrasex.org/OMES-presenta-hallazgos-encentros.html.
60. Wingood GM, DiClemente RJ. Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. Health Education & Behavior. 2000; 27:539–65. [PubMed: 11009126]
61. DiClemente RJ, Crosby RA, Kegler M. Emerging theories in health promotion practice and research: John Wiley & Sons; 2009.
62. Connell RW. Gender and Power. Society, the Person and Sexual Politics. Oxford, England1987.
63. Shannon K, Kerr T, Allinott S, Chettiar J, Shoveller J, Tyndall MW. Social and structural violence and power relations in mitigating HIV risk of drug-using women in survival sex work. Social science & medicine. 2008; 66:911–21. [PubMed: 18155336]
64. Gruskin S, Ferguson L, O'Malley J. Ensuring sexual and reproductive health for people living with HIV: an overview of key human rights, policy and health systems issues. Reproductive health matters. 2007; 15:4–26. [PubMed: 17531746]
65. Shannon K, Goldenberg SM, Deering KN, Strathdee SA. HIV infection among female sex workers in concentrated and high prevalence epidemics: why a structural determinants framework is needed. Current Opinion in HIV and AIDS. 2014; 9:174. [PubMed: 24464089]
66. Goldenberg SM, Chettiar J, Simo A, Silverman JG, Strathdee SA, Montaner JS, et al. Early Sex Work Initiation Independently Elevates Odds of HIV Infection and Police Arrest Among Adult Sex Workers in a Canadian Setting. JAIDS Journal of Acquired Immune Deficiency Syndromes. 2014; 65:122–8. [PubMed: 23982660]
67. Goldenberg S, Rangel G, Vera A, Patterson T, Abramovitz D, Silverman J, et al. Exploring the Impact of Underage Sex Work Among Female Sex Workers in Two Mexico–US Border Cities. AIDS Behav. 2012; 16:969–81. [PubMed: 22012147]
68. Goldenberg S, Silverman J, Bojorquez-Chapela I, Engstrom D, Usita P, Rolon M. Exploring the context of involuntary and adolescent sex industry involvement in Tijuana, Mexico: Consequences for HIV risk and prevention. Violence Against Women. In Press.
69. Lupton D The imperative of health: Public health and the regulated body: Taylor & Francis; 1995.
70. Youngs G Private pain/public peace: Women's rights as human rights and Amnesty International's report on violence against women. Signs. 2003; 28:1209–29.
71. Bell SA. Violence against sex workers in Latin America: Pervasiveness, impunity, and implications. Human Rights and Human Welfare. 2009:132–50.
72. World Health Organization. Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries. Geneva, Switzerland2012.

Table 1:

Socio-demographic characteristics of female migrant sex workers (N=53) in Tecún Umán and Quetzaltenango, Guatemala

MEASURE	N (%)
Interview location	
• Tecun Uman	40 (75)
• Quetzaltenango	13 (25)
Age*, in years mean, (min, max)*	31 (20, 47)
Civil Status	
• Single	34 (64)
• Married/Partnership	8 (15)
• Widow	7 (13)
Divorced	4 (8)
Level of Education	
• None	6 (11)
• Some primary school	20 (38)
• Finished primary school	11 (21)
• Some secondary school	2 (4)
• Finished secondary school	5 (9)
• Some preparatory school	3 (6)
• Finished preparatory school	6 (11)
Country of Origin	
• El Salvador	10 (19)
• Honduras	11 (20)
• Guatemala	26 (49)
• Nicaragua	4 (8)
• Mexico	2 (4)
Place where women engage in sex work	
• Entertainment venues (bars, closed houses, night clubs)	31 (59)
• Informal venues (*cantinas, centros botaneros*)	6 (11)
• Independent or mobile (hotels/motels, rented rooms, trucks)	16 (30)