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“Jumping on a Train to Somewhere”: Female Streetwalkers’ Perspectives on Migration and HIV/STI Risks in the Changing Economic and Social Environment: A Qualitative Study in Shanghai, China

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Abstract

China's 30-year economic boom has created a unique social and economic market for commercial sex, as well as for a workforce of migrant women from rural China. This qualitative study explores the impact of the rapidly changing social and economic environment on migration patterns, sexually transmitted infection (STI) knowledge, STI risk behaviours, and health beliefs among female streetwalkers in Shanghai. Qualitative data were collected in 2010 through semi-structured in-depth interviews with 16 streetwalkers to characterise their migration passages, sexual health and behaviours, and peer networks. Many streetwalkers reported histories of childhood impoverishment, of family or partner violence or trauma, of migration consistent with the timeline and routes of economic development, and of a scarcity in health, social, or economic support. Their knowledge of the prevention and treatment of HIV and STIs was limited. They had little bargaining power on condom use, and the majority resorted to vaginal douching and self-management with antibiotics as preventative measures. The study identifies streetwalkers’ perspectives on the changing environment, their options and actions, and finally HIV/STI risks that were unique to this hidden population.

Keywords

female streetwalker; migration; HIV; sexual transmitted infections; China

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Introduction

Nearly seventy percent of China's new HIV infections were attributed to heterosexual transmission in 2013 (NHFPC 2014). This figure has more than doubled since 2006 (30.3%) when HIV transmission in China was still dominated by injection drug use (UNGASS 2014). Meanwhile, the resurgence of syphilis and other sexually transmitted infections (STIs) in China is considered unprecedented in the post-penicillin era (Chen et al. 2012a; Hesketh, Ye, and Zhu 2008; Parish et al. 2003; Pearline et al. 2010; Tucker, Chen, and Peeling 2010). Linked to these trends, the China National Center for HIV and STI Treatment and Prevention has identified female commercial sex workers and rural-to-urban migrants as key high-risk populations for HIV (WHO 2005). Information from recent studies suggests that lower-end sex workers could account for a disproportional burden of STIs in China (Baral et al. 2012; Chen et al. 2012b), and one such study (Chen et al. 2012b) also reported lower-end female sex workers in China were 2.7 times more likely to test positive for HIV compared to sex workers from middle- and higher-tier venues.

Prostitution flourished in World War II era Shanghai, and STI prevalence was high, with up to ten to fifteen percent of Shanghai residents being infected with syphilis (Henriot 2001; Hershatter 1997). In the early 1950s, the newly established communist government outlawed prostitution and sent prostitutes to re-education/rehabilitation camps. This suppression of commercial sex was accompanied by a commensurate decrease in STIs, with additional help from antibiotics, a structured public health system, and a strict social policing system. Since the mid-1980s, however, the commercial sex industry has re-emerged in conjunction with China's economic boom, the government's relaxation of migration controls, and societal changes in attitudes and behaviours towards sex (Goodyear 2008; Hong and Li 2008; Pan 2000, 2004, 2008; Sheng and Cao 2008; Wu et al. 2008; Wu and Wang 2010). Currently commercial sex in China is illegal but widespread (Gil et al. 1996; Rogers et al. 2002).

The profile of female sex workers in China is diverse. One study lists twelve different types of female sex workers reflecting a variation of work organisations, incomes, and clientele (Huang et al. 2004). Female sex workers themselves range from college students who work as part-time, freelance courtesans and escorts, brothel-based sex workers, to older streetwalkers (Yang and Xia 2006). The growing number of female sex workers has also caused the price of commercial sex to plummet, increasing economic pressure on lower-income sex workers to forego safer sex practices (Yang et al. 2010). Streetwalkers -- sex workers who are not housed in a venue and do not have a manager -- are at the lower end of this sex work hierarchy, and they are reported to be highly mobile and have an elevated risk of arrest or involvement in street violence (Choi, Chen, and Jiang 2008; Choi and Holroyd 2007; Xin 1999; Yi et al. 2010). In addition, Hao et al. (2014) has reported that the majority of the streetwalkers tend to be older than those who work in Karaoke Bars (KTV) and hair salons or massage parlours.

Many female sex workers in urban areas are migrants from rural China. Since the 1980s, China's expanding factory-based job market, rapid growth of an urban-rural income gap, and a relaxation of the household registration *hukou* system have contributed to the creation of a large internal rural-to-urban migration (Seeborg, Jin, and Zhu 2000; Li 1996). As 121

million young migrants left overcrowded and poverty-bound farmland for factories and cities near the special economic zones, many women ended up in the sex trade (China National Bureau of Statistics 2000). Studies indicated these migrant sex workers appeared to be at greater risk of STIs than their local counterparts due to social disintegration and lack of social services (Hesketh et al. 2006; Hong et al. 2006; Lin et al. 2005; Yang et al. 2005). Nevertheless, little is known about the influence of the changing social and economic environments on their decisions and actions to become sex workers, and how this migration experience affects their sexual health. Researchers have commonly assumed this sub-population of sex workers to be inaccessible, less well represented in national HIV surveillance, and less likely to be covered in intervention programmes (Chen et al. 2012b; PRCMOH 2011; Poon et al. 2011).

Although prostitution is often identified as the oldest profession (Bassermann 1994), the dynamics underlying the work are not entirely well understood. While human society progresses and political environments change, a woman's decision to sell sex is still largely determined at an individual level by her economic position, culturally defined gender roles, and geographic variations in opportunities. Obtaining perspectives directly from female sex workers provides a window to a better understanding of the rationale for their actions and the determinants of their health and safety (Choudhury 2010). This analysis of life stories of sixteen female streetwalkers in Shanghai, China seeks to unveil some of the environmental elements surrounding this most vulnerable and exploited population. Qualitative methods were used because little is known about the migration passage, beliefs, norms, experiences, and understanding of STIs by streetwalkers in Shanghai, China. We hypothesise that migrant women were attracted to new opportunities and became sex workers due to economic and survival pressures; migrant workers are also more vulnerable to STIs; and that risk factors for HIV and STIs among migrant streetwalkers can be differentiated from those among local streetwalkers. Our project is a part of a larger mixed-methods study of migrant and non-migrant streetwalkers in Shanghai, China.

Methods

Settings and participants

Shanghai, China's second largest city, hosts the largest harbour in the world with about 18 million residents and 4 million rural-to-urban migrants as of 2010. Widely regarded as the hub of China's modern economy, the city serves as one of the nation's most important financial, industrial, and communications centers (Marine Insight 2010). More than 200,000 female sex workers are estimated to be working at various venues in Shanghai (Xia 2001).

A targeted sampling methodology (Kral et al. 2010) was used to recruit streetwalkers for this study's qualitative phase in Shanghai. All participants were recruited from the Zhabei district which hosts the Shanghai railway station, the main point of entry for migrants into the city. Eligibility for this study required that participants: (1) be biologically female; (2) are able to provide verbal or written consent in Mandarin; (3) presently self-identify as a commercial sex worker (having sex with men for money or goods); and (4) were not routinely working at any venue (i.e., looking for customers on streets). Staff members of *Shanghai Leyi*, a non-governmental organisation (NGO) that serves high HIV-risk populations, contacted and

recruited the 16 streetwalkers in this study. Interviews were conducted at either a public tea/coffee shop on the streets where the participants work or at the office of *Shanghai Leyi*. Each streetwalker was also given \$15 cash as compensation for their time (1-hour interview) and travel expenses, as well as a pre-packaged health education resource kit. This study was conducted as reviewed and approved by the Institutional Review Boards of both Georgetown University and Fudan University.

Qualitative data collection methods

Individual in-depth interviews were utilised due to the highly personal and sensitive questions to be asked. All interviews were conducted in Mandarin and in accordance with the study's protocol. A semi-structured interview guide was used to encourage women to discuss their early life, migration or trafficking history, debut into commercial sex, knowledge of HIV and other STIs, current social network, health care access and utilisation, daily routines, substance use, and high-risk sexual behaviours. Questions were translated into Mandarin Chinese and pretested and modified to reflect local dialect and cultural meaning before use in the interview. The guide was back-translated into English to ensure congruence with the original questions. Prior to the formal sessions, interviewers provided a description of the study to all respondents who met the inclusion criteria, ascertaining their willingness to participate. The interviewer then read a written consent form in Mandarin Chinese to the respondent, and both interviewer and respondent signed the form. All participants remained anonymous through the whole process but were assigned a study name. All sessions were taped with the permission of the participants.

Data management and analysis

Semi-structured interviews were conducted in Mandarin Chinese and were audiotaped and transcribed verbatim. The primary interview data consisted of field notes, audiotapes, and transcriptions. Translations of the transcripts were entered into NVIVO 9. Analysis of the interview data was conducted in two phases. The first phase of the analysis occurred simultaneously with data collection. At the end of each day of data collection, items were added to the concept matrices using the field notes. At the conclusion of data collection, a draft codebook was developed for use in the next phase of analysis.

Phase two of the analysis followed the completion of data collection and after the codebook and interviews were transcribed and translated. In this phase, data were systematically reexamined for emerging codes, themes, and patterns. To ensure validity and inter-coder agreement, two coders derived open coding schemes independently on all interview transcriptions. Kappa Statistic Interpretation from Viera and Garrett (2005) was used. Calculations of inter-rater validity indicated a high percentage agreement range of 93.64%-99.41% and a kappa statistic range of 0.245-0.816 ('Fair agreement' to 'Almost perfect agreement'). The overall unweighted kappa statistic was 0.512 (moderate agreement) and an overall percentage agreement of 97.45%.

Findings

Socio-demographic Descriptions

All 16 streetwalkers interviewed were between 30 to 50 years old, with the median age falling into the 41-45 year old age group (Table 1). Only four participants were Shanghai residents with local *Hukou*, while the others (75%) were migrants from the provinces of Hunan, Henan, Jiangsu, Sichuan, and Shandong. None of the women had received education beyond high school, and 56% had only elementary level or no formal education. All participants married at a relatively young age, with the vast majority married before the age of 23 years. Reported age of entrance into the sex trade was between 20-40 years old and monthly income varied widely (1,000 RMB to 10,000 RMB, equivalent to \$167 to \$1,667 USD). All respondents indicated that they were living in a rented apartment, and some shared the apartment with several other women or a boyfriend. The types of apartments were mostly old public housing, and some were expected to be torn down in the near future. The rent and monthly utilities ranged from 600 RMB per month (around \$90 USD) to 3,000 RMB per month (around 470 US dollars) in 2010. Although many of these migrant streetwalkers had lived in different cities before settling down in Shanghai, a few reported moving frequently, partly due to the difficulty of finding affordable rentals in downtown Shanghai. All four local streetwalkers, compared to the migrant streetwalkers, were in their forties, had obtained a middle school education, and in general reported higher monthly income (all above 5,000 RMB per month).

Entry into sex work industry

All migrant streetwalkers in the study came from remote and impoverished areas in China. Most had experienced family conflict and poverty during childhood. Many reported doing family chores during childhood then later made money selling small goods. A majority of the women began working between 14 and 17 years old after dropping out of school. These women later relocated to nearby towns or cities in search of better employment. Many women worked a large variety of low-paying jobs doing various small tasks to earn money before debuting in the sex trade. One woman described her early years as follows:

‘After third grade, I started doing work like cutting firewood and taking care of younger siblings. I learned how to cook at age five. I was at home the whole time to take care of family, 11 people including my grandma. When I was 14, I worked in a cookie factory. I went to work in Guangdong when I was 16 years old. When I was 19. I stocked the shoes from Guangzhou. I earned 400 to 500 Yuan a month selling shoes. That was in the year of 1989.’ (Li, 45 years old)

Dissatisfaction with marriage, debts and economic stress were common reasons quoted by the migrant interviewees for entering the sex trade. Marriage issues included forced/coerced marriage, conflict with their husband, husband's adultery, and in some cases, domestic violence. Some women also mentioned that their husbands amassed debts due to gambling or failed businesses. Most divorced women were left alone to find ways to earn enough money to pay for their children's needs such as food, health and education. In reference to her husband, an interviewee stated,

'Once in a fight he hit my back with a huge and wide stick. That was when I ran away.' (Yang, 43 years old)

Among migrant women, some mentioned that they were trafficked to another area, but escaped. One woman described her experience:

'I went with two friends out of town (to explore new opportunity for doing business), but ended up in a small village in mountain area. They had a banquet and left me with this toothless man. I knew if they knew I was pregnant I would never be able to escape again. I aborted (the child) in the river without their knowledge. After two years they no longer watched me so closely. I ran away when I went to the market alone, and jumped on a train to somewhere, even though I didn't know where it would take me.' (Xu, 38 years old)

Upon relocating, a few migrant women were introduced to men by an intermediary while others were approached directly by men on the street who offered them money or housing in return for sexual services. Several migrant streetwalkers mentioned being tricked into becoming a sex worker.

Among local Shanghai streetwalkers, divorce, dropping out of school, and drug use were common experiences before they entered into the sex industry. Compared to migrant streetwalkers, local streetwalkers were less likely to experience poverty as a barrier in their early life or report casual sex turning into commercial sex. They were less likely to consider sex work as an agency for them to gain independence and escape poverty, but more likely to blame personal failure in school and drug addiction on their current situation. One woman commented:

'My parents were in Shanghai. They passed away. Growing up, I couldn't find a job. It was my own problem, nothing to do with my family. I didn't get into college. Later I took a secretary course. I couldn't find a job. I dated someone, but we broke up. I met a girlfriend, and so she took me to Qianjiang in Guangzhou. I never knew it was this thing.' (Zhou, 49 years old) (sex work).

In summary, many migrant sex workers reported extremely difficult economic situations at home, low levels of education attainment, early marriage, sexual harassment, and family violence. The opening up of the market economy and a new norm of rural-to-urban migration provided opportunities for them to leave home. Migrant streetwalkers also shared a similar migration passage: from home town/village to an adjacent town initially, to a larger city in south China (e.g., Guangzhou, Fujian, etc) where economic experiment zones were had been set up in the 1980s, and eventually to Shanghai in the late 1990s after Shanghai became the latest economic development power house. Persuaded by friends or facing limited options with their poor skill set in a new city, most of the streetwalkers made their sex trade debuts in these southern cities. The local streetwalkers shared this same route, and many travelled through southern China to work in entertainment industries and eventually moved back to Shanghai after 1990s.

Work Environment: Clientele, competitions, and social network

Streetwalkers reported serving clients ranging from 20 to over 80 years old. In general, clientele can be categorized into three groups: domestic businessmen, foreign travellers, and local retired residents. Clients were solicited at various outdoor common space, such as public parks, karaoke bars, entertainment centers, and the streets. Business varied widely between high (i.e. summer, holidays, and paydays) and low seasons (i.e. government crack down, cold winter, and economic recessions). Many streetwalkers reported relying on regular clients or referrals during the low seasons. Their daily schedules are always adjusted to clients' demands. One woman commented,

'If there is business, I'll do it. There is no pattern for me as for when to get up or go to bed. I eat when I am hungry. I don't want to play poker anymore. I just want to sit on my bed or play on computer.' (Qin, 40 years old)

Streetwalkers tended to have small social circles. Most women reported that they only had two to three friends even though many had been in Shanghai for more than five years. Family and relatives were rarely mentioned in their current life. Some commented that they send money back home, but a deep sense of stigma and guilt prevented them from communicating with their families. Many women also cited the competitive nature of sex work as a barrier to forming close friendships with other streetwalkers. One streetwalker stated,

'I have met some younger "sisters," but I didn't talk to them that much. I saw everyone the same. I didn't tell them my difficulties or sadness. I dealt with all the matters myself.' (Li, 44 years old)

Some of the native Shanghai women reported having better relationships with other local sex workers, but their social groups tended to exclude migrant sex workers. Migrant streetwalkers generally accepted their inferior status relative to local streetwalkers, but no violent incidents were reported. The two groups usually work in different sections of the city.

Knowledge of HIV/STI and self-management of antibiotics

Migrant streetwalkers reported more barriers to getting health education than reported by the local streetwalkers. They often talked about acquiring fragments of information about sexually transmitted infections through their own experiences and from magazines. Those women who understood HIV transmission usually reported obtaining the knowledge from jails and drug rehabilitation centers. Most knew the symptoms of syphilis, gonorrhoea, and genital warts. When asked to describe common STIs, one streetwalker explained,

'I've heard about [gonorrhoea] before I come here. I know the smell and the colour . . . [syphilis] looks like a flower.' (Wu, 50 years old)

Many misconceptions based in folklore were disclosed during these conversations. Self-management of STIs with antibiotics was mentioned by several streetwalkers as a routine to prevent and treat illness. One streetwalker stated,

'Some people say that having antibiotics on the 3rd or 4th day of the period can help to eliminate the toxins in our body. I didn't know it before, but now I often

take penicillin like this. We used to obtain intravenous injections during every period, once a month, to eliminate the toxins.’ (Qin, 40 years old)

In addition, migrant streetwalkers described a frequently utilised method for STI prevention and personal hygiene incorporating vaginal douching with cleansing lotion, sterilised water, and herbal medicine. Many sex workers believed that cleanliness could protect them from contracting STIs. These streetwalkers, much like other residents in China, prefer self-management with antibiotics. Some of these streetwalkers indicated that the practice of using antibiotics originated in their hometown health clinics. One streetwalker commented,

‘It’s too expensive to receive treatment in the hospital. When I was sick in my hometown, I had intravenous infusion of penicillin. It cost less than 100 Yuan. So after I came here (Shanghai), I went to ask for intravenous therapy again.’ (Li, 44 years old)

On the other hand, no migrant streetwalkers complained about health access in Shanghai. Due to their migrant status they cannot receive medical insurance, and most pay out of pocket for health care. However, several of these women said the community health center was convenient and affordable, and they reported better access to high quality health care compared to what was available back home.

Condom use and other sexual risk behaviours

When condom use as a prevention method against STIs was brought up in the conversations, most respondents cited a client’s preferences as the greatest obstacle to condom use. In addition, complaints about the cost and availability of condoms revealed other barriers. Generally, streetwalkers had observed an increase in clients’ willingness to wear condoms over the years, but most interviewees also reported that many clients still persistently refused to use condoms. The stated reasons included unfamiliarity with condoms or feeling that condoms were a barrier to pleasure and sexual function, especially among local older clients. One women stated,

‘I tell them I have AIDS, but some of them say that they don’t care. It’s really frustrating.’ (Li, 44 years old)

Another interviewee explained,

‘We have met clients who are sick. We are afraid to do it.... But it’s hard to control myself when I see the money.’ (Zhou, 49 years old)

As a consequence, overall condom use was low. Some streetwalkers opted to try putting on condoms without the knowledge of the clients by using alcohol and other distractions. This indicated that streetwalkers knew that condoms can prevent disease, but they had little power to negotiate for condom use. Female condoms as an alternative were believed to be too cumbersome and expensive for use by the streetwalkers. Most streetwalkers preferred not to use a condom during sex with “regular” clients, boyfriends, or husbands, as it would endanger the trust with their long-term partners. Some streetwalkers noted the lack of any negative health outcome experienced as a reinforcement of this perception.

Drug use, violence, and police harassment

Most streetwalkers reported that one of their biggest worries was being arrested or harassed by the police. In Shanghai at the time of the study, the consequences of being arrested as a sex worker by under-cover policemen included up to a 1,500 Yuan fine, up to two weeks in detention, and notification to their hometown police station. Multiple arrests and detection of drug use could result in up to two years at a labour camp (formerly known as re-education, or “re-education through labour”, centres). China's labour camp system was established under Mao in the 1950s but was formally closed down by current Chinese President Xi in November 2013. Many streetwalkers reported being fined or imprisoned on multiple occasions, and time spent in jail varied from overnight to two years. Several streetwalkers also reported being beaten by the police or otherwise mistreated. One strategy of the streetwalkers to lower their chance of being arrested and physically abused by the police was to report chronic conditions such as hypertension or depression. One woman commented:

‘I kept the doctor's diagnosis (of hypertension) with me, so that they (the police) would not dare to beat me. They would be afraid I could die there (and cause more investigations).’ (Yang, 50 years old)

On the other hand, women were provided with STI tests, education, and treatments in jail and the labour camp. Though both migrants and non-migrants have had police and prison experience, one non-migrant mentioned harsher police treatment towards migrant compared to non-migrant streetwalkers.

Aside from being arrested and harassed by local police, violence in different forms, including domestic violence, sexual abuse, robbery, threats and human trafficking, permeated the life stories of these streetwalkers. As children they often had to endure beatings by their parents. A few women reported being raped or beaten by their boyfriends or husbands, which was part of the reason they ran away from home. Many streetwalkers described violent encounters with clients who refused to pay or who robbed the women after receiving sexual services. One victim of such a robbery described the experience:

‘Once, we checked into a room and brought the client with us. But at the end, he tied us up and robbed us. We obediently gave him all we had. We would not rebel when this kind of thing happened.’ (Zhou, 49 years old)

Consumption of alcohol, tobacco, and club drugs were brought up by a few streetwalkers as ways to cope with stress and anxiety. Alcohol and tobacco smoking were legal and mentioned as frequent occurrences in the streetwalkers' daily lives, though cost concerns usually prevented them from abusing these substances. Drug use was perceived in general as dangerous and harmful. Most of the women had met clients who used or shared drugs. One woman elaborated,

‘They asked me to take drugs with them and said they would give me 1000 Yuan. I told them that even if they gave me 2000, I still wouldn't take drugs. They had to take drugs. They would lose their strength if they didn't.’ (Luo, 47 years old)

Some interviewees mentioned that clients who did drugs were more likely to request oral sex or refuse to wear condoms. Misconceptions that club drugs were less addictive or harmless also existed. Local sex workers were more likely to report addiction to heroin when they were younger and working in the south. These individuals stated that due to their drug addiction they could not live a normal life, were abandoned by their families, and had to use sex work as a means to obtain money for drugs. Several mentioned being arrested for drug use, but the “cold turkey” treatment in prisons was not effective. These women would go back to injecting drugs and sex work as soon as they were released from labour camp. One interviewee stated that she did not trust government-run needle exchange programmes or methadone clinics (MMT) as:

‘... policemen are always hiding at these places. If there are quota to be filled, they will arrest me and throw me into a labour camp again.’ (Chen, 48 years old)

Discussion

High STI rates and risk behaviours among sex workers have been reported by several studies using cross-sectional survey data from southern China (Zhou et al. 2014; Chen et al. 2012a, 2012b; Hong and Li 2008). The goal and scope of our study was not to repeat this work, but rather to explore why demographic and social factors put migrant streetwalkers at higher risk. In this sense our report complements recent work by Hao et al. (2014), focusing more on the rationale underlying the migration passage and on the contrast between migrant and local streetwalkers.

This study collected 16 life stories of streetwalkers in Shanghai to provide a better understanding of streetwalker perceptions regarding their options, choices, and actions, and to examine the health care access and sexual health risks of this hidden population. We found many migrant streetwalkers reported poverty and trauma in their childhood, and they also noted their excitement regarding opportunities available upon leaving their hometowns. Most of these women travelled voluntarily, attracted by the special economic zones and gaining some degree of autonomy. The majority of these streetwalkers are satisfied with their access to quality health care in the city, but they still have many misconceptions about infections and many use antibiotics as a form of primary prevention. In contrast, local streetwalkers were more likely to have a better education, worked in higher-end venues, and reported better income. While migrant streetwalkers reported more police violence, the local streetwalkers reported more drug use and addictions.

Specifically, study findings reflect how unique changes in the socioeconomic environment of China in the last 30 years have played a critical role in limiting the options and paths of migrant women. On the one hand, widespread poverty and lack of education, accompanied by stressful family conditions, constrained the choices of these women for making a living in the fast-changing economy. On the other hand, increased mobility prompted by a weakened *hukou* system, rural-to-urban migration to work in the coastal cities, and the lure of opportunities for quick and fast money circumscribed new migration paths for women. Many interviewees reported dropping out of school at an early age and moving to adjacent towns to work in emerging markets, restaurants, small factories, or the domestic services

industry. As their horizons broadened with new friends and ideas, women were more likely to relocate again voluntarily, though many of them also faced violence, exploitation, and challenges from failed businesses, debts, human trafficking, substance abuse, and gambling.

We discovered through the interviews that the principle migration paths of the participants followed the geographic trajectories of China's economic development (Chinability 2011). When the first wave of foreign investment poured into the economic experiment zones and non-state enterprise started to grow along the south-eastern China in the 1980s, migrants from west and central China flowed to the southern provinces of Guangzhou and Fu-jian. Both migrant streetwalkers and Shanghai local streetwalkers reported an attraction to these areas in the late 1980s and early 90s due to the job opportunities at small markets and in the entertainment industry, and many entered commercial sex industries in the southern cities. After a brief recession between 1989 and 1992, Deng Xiaoping's Southern Tour started a wave of government investment in Shanghai and boosted foreign direct investment inflows this area. As the economy in Shanghai caught up and eventually surpassed the economy of the southern cities in the beginning of the 21st century, many streetwalkers also moved north and settled in this area. This change in location offered an ample supply of clientele in the domestic and international business communities, as well as among local residents with extra money to spend. Today Shanghai is an economic powerhouse and is both the largest industrial base and the biggest international port in China.

Our data confirm that streetwalkers have relatively small social networks due to competition and stigma pertaining to sex work, drug use, or both, once they arrived in Shanghai. Migrant streetwalkers often rely on public space (i.e., streets and parks) to solicit local clients, while local streetwalkers are more closely tied to formal venues. This distinction accounts for why local streetwalkers reported higher income and why migrant streetwalkers are less likely to be reached by public health information programmes that rely heavily on venue-based dissemination. Many women only obtained health information and services from jails, where distrust and negative emotions run high. No overt conflicts between local and migrant streetwalkers were reported, due at least to the fact that they utilise different types of venues to solicit clients.

Very few complaints were reported by the migrant sex workers regarding access to clinical health care. Most of these women commented that they pay out-of-pocket for care, but they receive better quality care in Shanghai than they received in their hometowns. Twenty years of rural health care reform (1980-2000) are widely considered a failure, and the new limited rural insurance plan experiment was still ongoing at the time of the study; consequently, it is not surprising that migrants found better and more affordable health care in the cities (Meng, Liu, & Shi 2000).

One notable concern raised by our data is the streetwalkers' knowledge of and response to STIs. For example, some of the streetwalkers stated they relied on smell as an indicator of disease but did not know of other symptoms of STIs. In addition, due to negative experiences in medical facilities, some streetwalkers relied on their colleagues or personal experiences from rural areas for STI treatment. Many interviewees also stated that they self-prescribed antibiotics to prevent STIs, facilitating the spread of drug-resistant strains. STI

prevention education and access to appropriate medical treatment are critically needed for this population of women who have only a limited level of education.

Another concern highlighted in these interviews is the high frequency of substance abuse, especially by local streetwalkers who reported using heroin and club drugs. Depression and isolation also were prevalent within this particular population. Mental health issues may heighten the risk of substance abuse and subsequent risky behaviours among both migrant and non-migrant streetwalkers. Further research on this link between mental health and substance abuse among female sex workers is critical, as China is facing an increasing disease burden associated with substance use. Participants' perceptions of addiction may shed light on how to address these concerns within this population.

While we have learned a tremendous amount through these interviews, it is important to acknowledge the limitations of this study as they relate to the potential generalisability of the findings due to the small sample size (n=16) and qualitative nature of the data. In addition, the even smaller number of local streetwalkers in this sample (n=4) imposes even more stringent limitations on the inferences that can be drawn.

Conclusion

This is the first qualitative study focusing on the migration passages and health beliefs of middle-aged female streetwalkers in China. Our paper offers a preliminary portrait of this vulnerable and exploited population of women, and provides insight into the forces that shape this particular sector of the sex industry in China. Results from the study indicate that many streetwalkers in China began their journeys riding a tide of economic reform to escape rural poverty and domestic violence. Unfortunately, their lack of education and economic options made them vulnerable to violence and harassment, as well as to the problems of substance use. Women's low status in the sex work industry hierarchy and lack of STI knowledge heighten their risks of infectious disease, depression, and substance abuse. Self-management of STI risk with antibiotics increases the danger of the introduction of drug-resistant sexually transmitted infections. Future studies should focus on how streetwalker health beliefs lead to self preventive medication with antibiotics and how club drugs affect sexual health risks. Ultimately, these findings, along with those from parallel survey research, will provide evidence to design a more effective harm reduction intervention targeting this highly vulnerable and hidden population.

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Table 1

Demographic and socio-economic status of study participants.

	N=16	%
Age		
30-35	2	12.5%
35-40	4	25.0%
41-45	6	37.5%
46-50	4	25.0%
Hometown		
Henan	2	12.5%
Sichuan	2	12.5%
Chongqing	1	6.3%
Hunan	5	31.3%
Shanghai	4	25.0%
Jiangsu	1	6.3%
Shandong	1	6.3%
Area		
City	5	31.3%
Rural	11	68.7%
Education		
Never Attended School	1	6.3%
Elementary School	8	50.0%
Middle School	5	31.3%
High School	2	12.5%
Age at first marriage (n=15)		
17-19	3	20.0%
20-22	9	60.0%
23+	3	20.0%
Age of debut into sex trade (n=14)		
20-24	2	14.3%
25-29	3	21.4%
30-34	4	28.6%
35-39	3	21.4%
40-44	2	14.3%
Monthly income as a sex worker (n=12)		
1,000 RMB -5,000 RMB	8	66.7%
6,000 RMB -10,000 RMB	2	16.7%
>10,000 RMB	2	16.7%