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## Female Migrant Sex Workers in Moscow: Gender and Power Factors and HIV Risk

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### Abstract

This study aimed to build formative knowledge regarding HIV risks in female migrant sex workers in Moscow, focusing on gender and power. This was a collaborative ethnographic study, informed by the theory of gender and power, in which we conducted minimally structured interviews with 24 female sex workers who were migrants to Moscow and who provided sexual services to male migrant laborers. Overall, the female migrant sex workers engaged in HIV risk behaviors and practiced inadequate HIV protection with their clients. These behaviors were shaped by gender and power factors in the realms of labor, behavior, and cathexis. In the labor realm, because some female migrants were unable to earn enough money to support their families, they were pushed or pulled into sex work providing service to male migrants. In the behavior realm, many female migrant sex workers were intimidated by their male clients, feared violence, and lacked access to women's health care and prevention. In the cathexis realm, many had a sense of shame, social isolation, emotional distress, and lacked basic HIV knowledge and prevention skills. To prevent HIV transmission requires addressing the gender and power factors that shape HIV/AIDS risks among female migrant sex workers through multilevel intervention strategies.

### Keywords

HIV/AIDS; migration; female migration; sex work; Russia

### BACKGROUND

In Russia HIV/AIDS rates in the general population have surpassed 1%, with higher rates in sex workers (4.8%) (Shakarishvili et al., 2005; Decker et al, 2012). Russia is a major destination for labor migration from Central Asia, Eastern Europe, and the Caucasus. Increasing numbers of labor migrants globally are women (Oishi, 2005), with estimates of 15 to 20% of total labor migrants to Russia (Mezentseva, 2011). Increased economic hardships due to the recent global financial crisis as well as tightening of legal measures against migrant workers have made it even more difficult for migrant women to find employment (Mezentseva, 2011). Unemployed, struggling financially, and needing to support their families, many female migrants in Moscow turn to sex work, a pattern also demonstrated in other countries (Dworkin & Ehrhardt, 2006; Huang et al., 2004; Todd et al.,

2009). Moscow has an estimated 30,000 to 150,000 female sex workers, with a substantial proportion being migrants, although definitive statistics are lacking.

Research on female sex workers in multiple settings has documented their elevated risk for sexually transmitted infections (STIs) and HIV/AIDS (Choi & Holroyd, 2007; Hagan & Dulmaa, 2007). Risk behaviors associated with sex work include multiple sexual contacts, use of injecting drugs, and barriers to condom use, such as lack of knowledge, repeat clients, clients' refusal, threats of violence, and problems with police (Evans & Lambert, 2008; Parry et al., 2008). Several prior studies have focused on sex workers in Moscow. Aral et al (2003) highlighted the social-organization of sex work, describing that migration patterns created a demand for and supply of sex workers: male migrants away from their families and female migrants who needed income. Through these processes, "many women engage in sex work voluntarily and intermittently" (p. 43). Stachowiak et al. (2005) noted that all of the female sex workers studied were migrants to Moscow and that this amplified the, "real and perceived lack of control these women have over many aspects of their lives, from the decision to enter sex work to the eventual negative health consequences"(p. 22). Some female migrant sex workers have higher HIV risk associated with intravenous drug use (Lowndes, Alary, and Platt. 2001) and mobility (Reed et al, 2012). Other studies have suggested that higher risks could be associated with such specific migration-related factors as mobility, social exclusion, poor access to health care, violations of human and civil rights, younger age, low self-efficacy, lack of resources, lack of knowledge, attitudes of service providers, fear of violation of privacy, and involuntary sexual acts (Ghimire et al, 2011; Zimmerman et al, 2003).

Female migrant sex workers in Russia are a concern not only for Russia but also for migrant-sending countries. For example, prior studies have demonstrated that the vast majority (94%) of Tajik male labor migrants in Moscow regularly used female sex workers, all of whom were reportedly migrants (Weine, Bahromov, & Mirzoev, 2008; Weine et al, 2012).

Scientists and advocates have called for improving sex workers' living and working conditions through harm reduction and human rights approaches, including HIV prevention, and addressing the challenges of violence, injection drug use, and migration (Deering et al., 2008; Oishi, 2005; Lowndes, Alary, & Platt, 2001). Innovative HIV preventive interventions have been successfully developed and evaluated for female sex workers in multiple global settings (Cornish & Campbell, 2009; Ford et al., 2002; Morisky et al., 2004; Reza-Paul et al. 2008). However, presently in Moscow, no known HIV preventions have been designed and evaluated for the substantial public health problem involving female migrant sex workers and male labor migrants.

To inform better multilevel preventive intervention development with female migrant sex workers in Moscow, this study focused on women engaged in sex work with foreign male labor migrants in Moscow. To understand better the possible relation of their working and living under difficult conditions, this research was informed by Connell's theory of gender and power, which focuses on women's exposure to gender and power factors in three realms: labor (socioeconomic), behavior (power), and cathexis (affective attachments and social norms) (Connell, 1987; Wingood & DiClemente, 2000). This theory has been used to understand women's increased vulnerability to HIV and to develop public health interventions, but it has not yet been applied to female migrants, including sex workers. This study was also informed by theory and research that has: 1) explained why women leave their country for work (Oishi, 2005); and 2) delineated migrants' experiences of social, economic, and cultural transitions (Singer et al., 2006; Deering et al., 2008; Hirsch, Wardlow, Smith, & Phinney, 2010).

The specific aims of this study were: 1) to document, in a small sample in Russia, female migrant sex workers' HIV risk behaviors in relation to gender-and power-related factors in labor, behavior, and cathexis; and 2) to discuss risks, challenges, and resources that may be modifiable through preventive interventions or other measures.

## METHODS

This investigation was part of an ongoing collaboration formed in 2005 between U.S.-based researchers from the University of Illinois at Chicago (UIC) and health professionals from Tajikistan to address the public health risk of HIV/AIDS in Tajikistan and the Tajik diaspora in Moscow. The study ethnographers included U.S. medical doctors, a Tajik medical doctor, and trained ethnographers based in Moscow. All interviewers were trained in ethnographic interviewing and in the research background, aims, and methods.

### Recruitment

This study recruited a purposive sample of 24 female migrant sex workers, a sample size regarded as adequate to achieve “theoretical saturation”(Corbin & Strauss, 2008). Migrant sex workers were chosen to meet the following criteria: 1) age between 18 and 49 years; 2) migrant woman participating in sex work (providing sex services in exchange for money); and 3) working with foreign labor migrants (and, therefore, potentially bridging with the sending country). The recruited sample was heterogeneous with respect to country of origin, age, level of education, and place in the organization of sex work in Moscow. All respondents spoke Russian in addition to the official language of their native countries. Language proficiency was assessed during the consent procedures by asking each potential participant to answer three questions concerning their understanding of the research.

Based upon our familiarity with the organization of sex work for Tajik male migrants in Moscow, we first chose to identify potential participants through taxi drivers known to provide transportation for female sex workers to migrants. The study ethnographers worked with the taxi drivers to locate sex workers who were then screened and recruited for the study. In addition, some enrolled participants put ethnographers in contact with other sex workers who worked at different sites (e.g. bazaars, tochkas), resulting in a modified “snowball” recruitment method. Potential participants were purposively sampled, meaning participants were selected based on their ability to provide the most information about the phenomenon under study and to represent variations in relevant demographic characteristics. After providing each potential participant with a complete description of the study, oral informed consent was obtained as approved by the Institutional Review Boards of the University of Illinois at Chicago, the Tajik Ministry of Health, and the Russian Academy of Arts and Sciences, and Case Western Reserve University. Participants were paid \$20 for their participation in the interviews. To protect their safety, after obtaining verbal informed consent from anonymized participants, interviews were conducted in a private and secure location. Overall, 33 women were approached, 27 of these were found to be eligible, and 24 of those eligible participated.

### Interviews

All interviews were conducted in Russian. The interviews were conducted in locations selected by the participants to accommodate their preferences in terms of convenience and privacy; locations included their apartments, the research project's Moscow office, and secluded public locations, such as parks or cafes. These were minimally structured ethnographic interviews, lasting between 45 and 90 minutes, which were audiotaped with each participant's permission, transcribed, and translated into English. The interviews focused on the women's: 1) daily lives; 2) experiences with migration and life in Moscow;

3) home country lives and family; 4) experiences working in sex work; 5) interactions with clients; 6) experiences with Tajik male migrants; 7) social support and network in Moscow; 8) HIV/AIDS risk, knowledge, and prevention skills; and 9) access to health care and HIV testing. The initial study questions were refined through an iterative process of data collection and preliminary data analysis that followed standardized qualitative methods (Corbin & Strauss, 2008).

## Analysis

This study used a grounded theory approach to qualitative data analysis (Corbin & Strauss, 2008). The grounded theory approach is designed for the development of theory within the context of intensive field research. It is an iterative analysis that codes patterns in qualitative data to describe categories, typologies, and processes, leading to the creation of a model. The researchers used Atlas/ti computer software, which is designed for managing large amounts of qualitative data (Muhr, 2011). Transcripts of the interviews, translated into English, were entered into Atlas/ti.

The analysis began with a review of all interview transcripts by the research team, which yielded a set of categories corresponding to the conceptual framework and contributed to developing a coding scheme. The researchers established coder reliability with a selected subset of the code list by calculating percent agreement between reviewers, resolving differences by making consensus changes in the coding, and rechecking percent agreement until all coders achieved at least 80% agreement. Next, each transcript was coded by one of three coders using the coding scheme. The coders met regularly to discuss emerging issues in the coding approach and to refine coding strategies by consensus. Then, through pattern coding and creating memos, the analysis identified factors that were combined to generate a grounded theory model. The findings were reviewed by the entire team to check for contrary evidence.

## RESULTS

### Demographics

The female migrant sex workers came from: 1) the outer regions of Russia (Siberia, Tatarstan, Bashkiria); 2) Eastern Europe (Ukraine, Moldova, Belorussia); 3) Central Asia (Tajikistan, Uzbekistan, Kyrgyzstan), and; 4) Caucasus (Azerbaijan, Dagestan) (Table 1). Their mean age was 29.5 years (range 18–42 years). Nearly half the women had a high school education, and one-half had college or university education. Half of the participants had children. The majority (71%) were active in sex work only in the last three years or less.

### Grounded Theory Model

The analysis produced a grounded theory model that characterized how female migrant sex workers' HIV risk behaviors and inadequate protection were shaped by gender and power factors in the realms of labor, behavior, and cathexis. Below this model is summarized and illustrated with quotations.

### Labor Factors

Labor (socioeconomic) factors related to undertaking sex work were: 1) migrating for work; 2) push or pull factors into sex work, and; 3) the organization of sex work.

**Migrating for Work**—All participants stated that their primary reason for migrating was to find work to meet financial responsibilities for their families back home. Many articulated negative aspects of migrating, especially regret over leaving their children and fears of being

a woman in a foreign country. Some were single mothers who lost their husbands, either through death, abandonment, or divorce, and had to support their children alone. These women left their children with their parents or other relatives. “I had a husband, but he is a drug addict. So, I came here because I was so tired. He used to hit me so much” (Uzbekistan, 26).

Other participants were women who did not have children of their own, but who were financially responsible for other abandoned family members. “My family drinks a lot and I have a younger brother and sister, and so I need to help them financially.” (Ukraine, 18).

Other participants were unmarried women who became labor migrants to care for their elderly parents, especially those with medical problems who needed funds to pay for medical expenses. “So I send money for my father or medication. He tells me what he needs me to buy here in Moscow because there are no medications there. I buy medication for him” (Russia, 25).

Still other participants were young unmarried women who migrated less for pressing financial needs but for seeking adventure or higher education. “I had a really big desire to come to Moscow. I wanted to work and go to school, I mean, possibilities are large here” (Belorussia, 23). Some of these participants were students who found that their student stipends were inadequate.

**Pushed or Pulled into Sex Work**—The women described both push and pull factors leading them into sex work. Push factors included financial need, lack of stable employment, and inadequate income. Most participants from outside Russia reported an inability to find employment in Moscow citing problems with their legal status and residency permits (from the Soviet system of “propiska” that was used to control internal migration). “It is really hard to find a job because everyone demands citizenship or at least permission to work, which is impossible to find now because all the [migration] quotas have been filled.” (Kyrgyzstan, 38).

Some previously had jobs but lost them when the 2008 economic crisis devastated the Russian economy. Others were employed, but found their income insufficient to afford both the high cost of living in Moscow and supporting families back home. “...With the crisis, they started paying less, and we got fired for various reasons. So then I spent almost 6 months not working. And then I went to work and was earning pennies” (Tajikistan, 32).

Some women reported what may be considered pull factors, such as pressure from friends or acquaintances, or introductions to sex work handlers. “While I was looking for a job I met my present friend, she was also looking for a job, and she started to meet with men for money. She told me a lot about her men. And then she suggested that I try this kind of work” (Tajikistan, 25). Some women entering sex work reported an additional pull factor which was men who, through romantic relationship or casual acquaintance, introduced migrant women to sex work, in some instances, involving deception. “S. called me, we met up and started dating. Later he called me and told me to come over to his place. And there were about four friends of his. So we drank, of course, and I ended up sleeping with two of them. And they paid me. And I could not understand why, especially, since I was dating S. Later I found out that I was his rent” (Ukraine, 18).

**The Organization of Sex Work**—Sex work by female migrants was organized in ways aimed to connect them with male migrant clients. Most female migrant sex workers reported working in or near bazaars where migrant men work, or neighborhoods with high concentration of cheaper housing where migrant men reside. Some women did sex work in

the bazaars; others met in their clients' apartments, and others worked from their own apartments. Some women moved around the city in search of clients and worked in saunas, hotels, cafes, or parks. Only one participant worked at a "tochka" which is a designated area, at a train station or along the road, where sex workers congregated for "pick ups".

Some women worked for a handler or pimp, frequently the one who recruited the woman into sex work. He collected half of the women's earnings and supplied their clients. "He knows everything. He calls clients after sex. He doesn't ask me. He asks him how much he paid me. And he comes over, and I know that he knows, so I give him what I need to" (Ukraine, 18).

Other sex workers were self-employed but paid a man to act as a driver and bodyguard. Frequently, this man also helped to find clients. "He helps with security and clients and everything. Of course, I give him a percentage. Everything is legal and organized. He drops me off, drives me, and waits for me until all is done" (Ukraine, 28). Other self-employed women used a male acquaintance, often the one who initially suggested entering sex work, acting as "referral" for male clients. The women did not share their earnings with these men. "People call me and say they are from him; I understand that he sent me the client" (Siberia, 27).

Other self-employed sex workers worked together with their female migrant friends. These groups of migrant women looked for clients together and, frequently, lived together, saving money on rent and using their apartment to meet with clients. "We are four to the apartment. So when men come to us, it is easier for us, and when we have to go to some other apartment that is scary" (Kyrgyzstan, 37). Sex work activity was often arranged through referral networks in and around the bazaars or construction sites. "When the market is closing, they come... But you know the girls, so you know the clients. All happens like a chain" (Bashkiria, 28).

Another group of self-employed women worked alone, preferring to find clients by themselves, bringing them to their apartments or to hotels. These women tended to have been in Moscow longer and were more established in the city. They often worked in bazaars where they could find their own clients. "I have no guard, or anyone who watches out for me. I work alone. I either find clients myself. Or they approach me and try to get to know me" (Belorussia, 23).

The women's sex work earnings depended on how their work was organized, how they met clients, and how many clients they saw. Those who were less established charged less, around 1000 to 1500 rubles (US \$35–\$50), sometimes supplemented with payment in groceries. For those who worked with handlers, the "standard" price was between 2000 to 3000 rubles (about US \$70–\$105) for one hour, including vaginal intercourse. Some migrant sex workers charged per night, up to 5000 rubles (US \$180), sometimes involving contact with multiple men. Overall, the women reported adequate but not excessive earnings through sex work to afford living in Moscow, where rent was expensive, and to help their families back home. "I am happy with my life and that's all. I can afford to walk into a store and buy what I like" (Ukraine, 37).

## Behavior Factors

Behavior (power) factors identified were: 1) little access to women's health care and prevention; 2) client preference and intimidation; and 3) client violence.

**Little Access to Health Care and Prevention**—Without a residency permit, health care in Moscow was prohibitively expensive. Female migrant sex workers found it difficult



to save enough money to afford gynecological exams or treatment. “There is a clinic, it is not free. It is actually expensive. We have never gotten sick. But we are afraid of getting sick” (Uzbekistan, 30). Some women, especially those from Eastern Europe, reported continuing to visit a gynecologist at home, which was cheaper. “For women’s health, I go home. I have my own gynecologist there. Once in three months I take all the tests”(Ukraine, 37). Most reported that these visits home were organized both to seek healthcare and to visit family.

Most women were aware of the importance of health maintenance and worried about getting sick. “I am afraid. And there are some young girls too, who are sick. So, I go to the clinic and check myself out, and everything is good so far” (Uzbekistan, 23). However, many women, even despite regular checks, were not always certain about their healthcare. Only a few could name specific STIs, and those who did, named syphilis, which could reflect more of a historic than actual STI knowledge.. None could adequately describe the symptoms associated with common infections, or the details of their own healthcare checkup: “I’m not sure what they did, but they said it was OK” (Uzbekistan, 30).

**Client Preference and Intimidation**—Most participants initially reported consistent condom use with their clients. “Sometimes they buy their own. But I have my own stash” (Siberia, 27). When prompted, some reported forgoing condoms at clients’ requests when offered more money. “Of course, if someone pays me more, like not 2000 but 4000 [rubles], I sleep without condoms and then go home to Ukraine for a check-up”(Ukraine, 18).

Upon further questioning, women indicated that they used condoms much less when servicing “regular” clients. “When I have my regular clients, the ones I’ve known for a long time, if you know the person is clean, then you can have sex without”(Ukraine, 37). The women did not identify any particular criteria or timeline for when a client became regular. They did not describe these relationships as romantic and insisted that regular clients remained clients despite decreased condom use. None considered the men’s sexual relations with others, including other sex workers, and what risks it posed for HIV or STI transmission during unprotected intercourse.

None of the participants reported challenges in acquiring condoms in Moscow, which women said were readily available for purchase. However, some women who met men in public places reported reluctance to carry condoms because if apprehended by the police, they would be accused of being sex workers and would have to pay bribes. Though several used alcohol, none reported that alcohol or drug use was an obstacle to condom use. Some reported incidents of violence and physical force in sex work, which prevented them from using condoms. “Sometimes they force you to have sex without condoms because when we refused someone would hold our legs, someone would hold our arms”(Tatarstan, 28). Several reported working regularly without condoms. They reported no knowledge or practice regarding condoms prior to arrival in Moscow.

**Client Violence**—The women were very concerned for their physical safety during sex work, with many reporting stories of violence. “The client wanted me to put it in my mouth, and I didn’t have any desire to do that. So, then the chaos breaks out...and that’s when the hands go off”(Belorussia, 23). “They can take a cigarette and put it out on your body. They don’t really care. They start pulling hair. Or if there are four people, and I am by myself, the four will attack me”(Tatarstan, 28). Some women reported calling the police when endangered, but for many female migrant sex workers, the police were regarded as another potential threat. Many sex workers reported being detained by the police who expected bribes. “If a cop catches you, you have to pay money. Nothing happens without money. You

have to pay everywhere” (Ukraine, 37). Those working on the street were the most vulnerable to the police.

### Cathexis Factors

Cathexis (affective attachment and social norms) factors identified were: 1) attitudes toward sex work; 2) limited support network; 3) basic HIV knowledge and prevention skills; 4) emotional distress.

**Attitudes Toward Sex Work**—Many women, especially Muslims from Central Asia, reported feelings of deep shame and tremendous fears of their family finding out about their sex work. “This is a stigma; no one wants to say this is what we do. If they find out, they will kill us, seriously. We are scared that our parents will find out, or our brothers” (Uzbekistan, 30). Other women viewed it as a temporary necessity while living in Moscow to earn additional money especially when the economic crisis made employment difficult. “This is not forever. I hope that the crisis will be over. I also don’t really want to continue doing this, but it just so happens that I need money more” (Siberia, 27). These women tended to view their vocation in pragmatic terms.

For a few, sex work was viewed as a career change that allowed more freedom and higher earnings. These women spoke more openly and had a more positive attitude about doing sex work. “Though I’m not a beauty, I understood that I could improve my life via the bed” (Tajikistan, 34). For these women, sex work provided income adequate enough to live in the capital and care for their families, financial stability overshadowing prejudices against sex work. These women projected an upbeat attitude about their life in Moscow. “There is nothing strange about it, everyone makes money how they can” (Ukraine, 37).

**Limited Support Networks**—Female migrant sex workers reported limited family and social support in Moscow. Most women lied to their families about their employment. “I tell them I have multiple jobs, that I work one job during the day, another at night. I try to weasel my way out, so that no one finds out” (Tajikistan, 32). Only two participants reported their family’s knowledge of their sex work. One traveled from Tajikistan because of family’s dire need of finances. “I have come here with their permission. They are supportive” (Tajikistan, 30). The other traveled to Moscow to seek work in the sex industry to support her aging mother. “My mother is ill, and I help her out now. She knows what I do. At first, she cried, but I told her there is no way to make a living. You need medications and shots” (Tatarstan, 27).

Some female migrant sex workers reported having a support network of female friends who were also engaged in sex work. “I have girlfriends. We help each other. When there is no money, we help each other with food. We always go together to clients, so that nothing happens. And then if we are sad, we turn to each other” (Uzbekistan, 30). However, others regarded Moscow as a hostile environment where it was difficult to make true friends. “Once the crisis hit everyone was in for themselves. Moscow life became cut-throat and no one was interested in helping each other or having friends” (Tajikistan, 32). “They throw you out. Or they become your pimps, or have connections to other pimps. There is no one. Everyone survives for themselves” (Moldova, 22). The biggest obstacle to making friends who were not sex workers was a woman’s inability to disclose what she did. “No one knows what kind of job I do. This is all kept inside. So, there hasn’t been anyone” (Tajikistan, 32).

**Basic HIV Risk Knowledge and Prevention**—All the participants had heard about HIV/AIDS. Despite their varying ages, education levels, and countries of origin, most possessed basic information about the virus, transmission, and prevention, which they had



learned both in their home country and in Moscow. “Many people talk about it on TV, in brochures, and in newspapers”(Tajikistan, 32). The female migrant sex workers were concerned about acquiring HIV/AIDS and other STIs from sex work, despite their limited knowledge. “I don’t want to spend his money for treatment from diseases he gave me. There is AIDS, there are other diseases. That’s why it is very dangerous”(Siberia, 24). “I don’t even want to talk about it. God forbid we encounter it. It is a bad a disease, I know about it, but I don’t want to tell you. Don’t even want to hear about it.”(Uzbekistan, 37). This fear was common and strong enough to motivate most of the women to use condoms. “I use condoms. I mean, there are so many diseases. In addition to [prostitution], to suffer even more, how is that possible?”(Tajikistan, 42).

**Emotional Distress**—Many, though not all, migrant women struggled emotionally with their participation in sex work in Moscow, and several of them reported sadness, shame, low-energy, isolation, and lack of hope, suggesting that some may be depressed. “I am so tired of my life. My whole life goes by without any good times, without nothing. To be honest, my own life is not interesting for me anymore” (Tajikistan, 42). This distress was compounded by isolation, separation from family, and migration status. Several sex workers reported drinking alcohol regularly. “Sometimes I get sad, there is vodka in the fridge” (Ukraine, 37). None of the women reported injecting drug use, however, some reported instances of clients smoking marijuana or hash, demonstrating abstinence despite exposure to substances. “Sometimes there are guys are who drug addicts, and they demand drugs and try to force us to use too”(Uzbekistan, 37). Most of the women want to stop doing sex work as soon as possible, but could not yet see doing so. “This is just really bad. All I want is to end this all. I am so tired of this, and I just want to go home”(Dagestan, 25). Some could not because their handler kept their passport. “He has it in the bar, where all the other passports are of all the other girls”(Ukraine, 18).

## DISCUSSION

Among female migrant sex workers in this study, HIV risk behaviors and inadequate HIV protection were shaped by gender and power factors in the realms of labor, behavior, and cathexis. In the labor (socioeconomic) realm, due to inability to earn enough money to support their families, some of the participants were pushed or pulled into sex work in which they provided service to male migrants. In the behavior (power) realm, many were intimidated by their male clients, feared violence, and lacked access to women’s health care and prevention. In the cathexis (affective attachments and social norms) realm, many had a sense of shame, social isolation, emotional distress, and lacked basic HIV knowledge and prevention skills.

The roles of these factors in shaping HIV risk among study participants was consistent with what has been described in the theory of gender and power by Wingood and DiClemente (2000) and Connell (1987). Although this study attempted no comparison with male labor migrants, it was clear that unlike their male counterparts, socioeconomic conditions more frequently led these respondents into sex work in which their HIV sexual risk behaviors were then further compounded by gender and power factors as well as their migration status (Weine et al, 2009).

We found that most female migrant sex worker participants reported: 1) knowing that condoms prevent HIV infection; 2) being able to acquire condoms, and; 3) using condoms with clients. This resonates with prior reports which have shown that sex workers were often able to manage HIV protection (Tampep, 2009). On the other hand, we found several areas of concern regarding the possible special vulnerability of participants in our study to HIV. First, some participants lacked condom negotiation skills, and their clients’ strong

preferences for no condoms often led to diminished condom use. Second, we found diminished condom use with repeat clients, a pattern also described among sex workers in other settings (Kendall & Pelcastre, 2010). Yet for some study participants, condom use was the norm, regardless of familiarity. These women appeared to have more HIV knowledge and prevention skills, as well as more fear of acquiring AIDS. This suggests that it could be possible to increase sex workers' condom use by enhancing their knowledge and awareness through a targeted HIV preventive intervention, perhaps as part of a multilevel intervention that also targeted their male migrant clients.

Third, another important finding was inadequate access to health care treatment and prevention among our study participants. These women's migration status made clinic visits unaffordable, and only a few were able to travel home where health care was cheaper. Furthermore, many study participants lacked adequate HIV/AIDS and STI knowledge and would benefit from more information including testing, symptoms, treatment, and prevention. Finally, despite the deception involved, none of those interviewed reported being brought into the country specifically for the purpose of prostitution or being otherwise trafficked. However, also unlike male migrants, many found themselves trapped in situations either financially or because of a handlers' exploitation.

### Recommendations

Prior research on sex work in Russia called for attention to the women's health and mental health needs and human rights (Stachowiak et al, 2005) and the socioeconomic and organizational context of sex work (Aral et al, 2003). Our findings point to the role of gender and power factors in shaping HIV/AIDS risks among the female migrant sex workers who participated in our study. This suggests that multiple strategies might be considered, which encompass the following components (Jane et al, 2004).

Regarding labor factors, the priorities might be to counter the socioeconomic ills of female migrants and their illegal exploitation by sex work recruiters. One approach could involve developing economic policies that would create earning alternatives for female migrants (e.g. training courses and micro-credit). Some such approaches have succeeded on a small scale but have faced difficulties scaling up (Greenall, 2007). Another approach could create an additional legal framework to protect female migrants' legal rights in Russia, although this is highly unlikely in the present political milieu. Community mobilizing interventions advocating for sex worker rights were effective in Western Europe, but have not yet been successful in Russia.

As for behavior factors, countering power imbalances in which sex workers are intimidated by their male clients and lack access to care and prevention is an area to be addressed. One approach could be community empowerment to strengthen peer support networks and to disseminate knowledge about skills for staying safe in sex work (Bingawalo et al., 2010; Nishigawa, 2002). A second approach could be integrating violence prevention into women's health care and HIV prevention and facilitating access to care and prevention without fear of police (Tampep, 2009; WHO, 2006).

Regarding cathexis factors (affective attachments and social norms), helping women to overcome their shame and lack of confidence and giving them basic HIV knowledge and prevention skills would seem helpful. One approach could be to address their emotional distress and/or disempowerment through peer support, though some may need individual counseling or mental health treatment (Weine et al, 2012). Lastly, these women could benefit from education on the importance of consistent condom use, condom negotiation skills, and refusing services to clients who disagree.

These interventions could be undertaken from multiple types of settings at different points in the migration trajectory. One possible location for HIV prevention as well as testing and treatment would be primary care clinics serving migrant women in both sending and receiving countries (several exist in Moscow). Another strategy is suggested by the fact that although many female migrant sex workers appeared to be isolated from their diaspora communities, many nonetheless reported social connections with other female migrants involved in sex work. Given the reported success of HIV prevention efforts organized through peer networks in other settings (Cornish & Campbell, 2009; Reza-Paul et al., 2008), either social networks or popular opinion leader approaches might work with female migrant sex workers in Moscow (NIMH, 2007). Such efforts could take place in and around areas with known concentration of migrants, such as bazaars. Another strategy would focus on raising awareness pre-departure in the sending countries, such as in the Labor of Ministry's training course for unemployed women.

This study had several limitations. First, because recruitment occurred in a small number of locations and used purposive sampling, selection bias might have occurred. The study sample reflected some, but certainly not all, of the diversity amongst migrant sex workers in Moscow, thus reducing the generalizability of the findings. Second, given that for some participants, Russian was not their first language, gaps in understanding or misunderstandings of questions and responses could have occurred. Third, because the study's focus on HIV prevention was explained to participants prior to the interview, positive reporting bias in condom usage may have occurred. Fourth, the lack of coding of every transcript by more than one coder detracted from the quality control of coding. Finally, because the study lacked a comparison group, it could not identify whether migrant sex workers differed in HIV risks or gender and power factors from non-migrant sex workers. Further studies with community collaboration, mixed methods, longitudinal design, larger and more representative samples, as well as HIV preventive interventions, are needed. These studies could aim to build knowledge and services that contribute to: 1) helping female migrants avoid the path into sex work; 2) helping those female migrants involved in sex work enhance their HIV/AIDS protection and access to women's health care; and 3) facilitating female migrants' exit from sex work.

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## REFERENCES

- Aral S, St. Lawrence J, Tikhonova L, et al. The social organization of commercial sex work in Moscow, Russia. *Sex Trans Dis.* 2003; 30:39–45.
- Binagwaho AM, Agbonyitor A, Mwanawasa P, et al. Developing human rights-based strategies to improve health among female sex workers in Rwanda. *Health and Hum Rights: An Int J.* 2010; 12:89–100.
- Choi S, Holroyd E. The influence of power, poverty, and agency in the negotiation of condom use for female sex workers in mainland China. *Cult Health Sex.* 2007; 9(5):489–503. [PubMed: 17687674]
- Connell, RW. *Gender and power.* Stanford, CA: Stanford University Press; 1987.
- Corbin, J.; Strauss, A. *Basics of qualitative research: Techniques and procedures for developing grounded theory.* California: Sage Publications; 2008.
- Cornish F, Campbell C. The social conditions for successful peer education: A comparison of two HIV prevention programs run by sex workers in India and South Africa. *Am J Community Psychol.* 2009; 44:123–135. [PubMed: 19521765]

- Decker MR, Wirtz AL, Baral SD, et al. Injection drug use, sexual risk, violence and STI/HIV among Moscow female sex workers. *Sex Transm Infect.* 2012 Jun; 88(4):278–283. 2012. [PubMed: 22287530]
- Deering KN, Vickerman P, Moses S, et al. The impact of out-migrants and out-migration on the HIV/AIDS epidemic: A case study from southwest India. *AIDS.* 2008; 22(5):165–181. [PubMed: 18090413]
- Dworkin SL, Ehrhardt AA. Going beyond "ABC" to include "GEM": Critical reflections on progress in the HIV/AIDS epidemic. *Am J Public Health.* 2006; 97(1):13–18. [PubMed: 17138923]
- Evans C, Lambert H. The limits of behaviour change theory: Condom use and contexts of HIV risk in the Kolkata sex industry. *Cult Health Sex.* 2008; 10(1):27–41. [PubMed: 18038279]
- Ford K, Wirawan DN, Reed BD, et al. The Bali STD/AIDS Study: Evaluation of an intervention for sex workers. *Sex Trans Dis.* 2002; 29:50–58.
- Ghimire L, Smith WCS, van Teijlingen ER, et al. Reasons for non-use of condoms and self-efficacy among female sex workers: A qualitative study in Nepal. *BMC Women's Health.* 2011; 11:1–8. [PubMed: 21247478]
- Greenall M. Review of the Evidence Base for an "Evidence-Based" Policy on HIV Programming with Sex Workers. The Paulo Longo Research Initiative. 2007
- Hagan J, Dulmaa N. Risk factors and prevalence of HIV and sexually transmitted infections among low-income female commercial sex workers in Mongolia. *Sex Trans Dis.* 2007; 34(2):83–87.
- Hirsch, JS.; Wardlow, H.; Smith, DJ.; Phinney, H. *The secret: Love, marriage, and HIV.* Nashville, Tennessee: Vanderbilt University Press; 2010.
- Huang Y, Henderson GE, Pan S, Cohen MS. HIV/AIDS risk among brothel-based female sex workers in China: Assessing the terms, content, and knowledge of sex work. *Sex Trans Dis.* 2004; 11:695–700.
- Jana S, Basu I, Rotheram-Borus MJ, Newman P. The Sonagachi Project: a sustainable community intervention program. *AIDS education and prevention: official publication of the International Society for AIDS Education.* 2004; 16
- Kendall T, Pelcastre BE. HIV vulnerability and condom use among migrant women factory workers in Puebla, Mexico. *Health Care Women Int.* 2010; 31(6):515–532. [PubMed: 20461602]
- Lowndes CM, Alary M, Platt L. Injection drug use, commercial sex work, and the HIV/STI epidemic in the Russian Federation. *Sex Trans Dis.* 2001; 30(1):46–48.
- Mezentseva, E. Gender analysis of national policy for HIV/AIDS prevention in Tajikistan. Dushanbe, Tajikistan: UNAIDS & UNIFEM; 2010.
- Morisky D, Ang A, Coly A, et al. A model HIV/AIDS risk reduction program in the Philippines: A comprehensive community-based approach through participatory action research. *Health Promot Int.* 2004; 19(1):69–76. [PubMed: 14976174]
- Muhr, T. *ATLAS/ti 6.0 user's manual and reference (Version 6.0).* Berlin: Scientific Software Development; 2011.
- NIMH Collaborative HIV/STD Prevention Trial Group. The community popular opinion leader HIV prevention programme: conceptual basis and intervention procedures. *AIDS.* 2007; 21(Suppl. 2):S59–S68.
- Nishigaya K. Female garment factory workers in Cambodia: Migration, sex work and HIV/AIDS. *Women and Health.* 2002; 35:27–42. [PubMed: 12216990]
- Oishi, N. *Women in motion: Globalization, state policies, and labor migration in Asia.* Stanford, California: Stanford University Press; 2005.
- Parry C, Dewing S, Petersen P, et al. Rapid assessment of HIV risk behavior in drug using sex workers in three cities in South Africa. *AIDS Behav.* 2008; 13:849–859. [PubMed: 18324470]
- Reed E, Gupta J, Biradavolu M, Blankenship KM. Migration/mobility and risk factors for HIV among female sex workers in Andhra Pradesh, India: implications for HIV prevention. *Int J STD AIDS.* 2012 Apr; 23(4):e7–e13. [PubMed: 22581964]
- Reza-Paul S, Beattie T, Syed HU, et al. Declines in risk behavior and sexually transmitted infection prevalence following a community-led HIV preventive intervention among female sex workers in Mysore, India. *AIDS.* 2008; 22(5):91–100.

- Shakarishvili A, Dubovskaya LK, Zohrabyan LS, St. Lawrence JS, Aral SO, Dugasheva LG, et al. Sex work, drug use, HIV infection, and spread of sexually transmitted infections in Moscow, Russian Federation. *The Lancet*. 2005; 366:57–60.
- Stachowiak JA, Sherman S, Konakova A, et al. Health risks and power among female sex workers in Moscow. *SIECUS Report*. 2005; 33(2):18–25.
- Tampep. Sex work migration health. European Network for HIV/STD Prevention in Prostitution (Europap/Tampep 8). 2009
- Todd CS, Khakimov MM, Giyasova GM, et al. Prevalence and factors associated with HIV virus infection among sex workers in Samarkand, Uzbekistan. *Sex Trans Dis*. 2009; 36:70–72.
- Weine S, Bahromov M, Loue S, Owens L. Trauma Exposure, PTSD, and HIV Sexual Risk Behaviors among Labor Migrants from Tajikistan. *AIDS Behav*. 2012; 16(6):1659–1669. [PubMed: 22261829]
- 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 Educ Behav*. 2000; 27(5): 539–565. [PubMed: 11009126]
- World Health Organization. Department of Gender, Women and Health, Department of HIV/AIDS, World Health Organization; 2006. Addressing violence against women in HIV testing and counselling: A meeting report, Geneva, 16–18 January.
- Zimmerman, C.; Yun, K.; Shvab, I., et al. Findings from a European study. London: London School of Hygiene & Tropical Medicine (LSHTM); 2003. The health risks and consequences of trafficking in women and adolescents.

**Table 1**

## Demographic Characteristics of Study Participants

<b>Variable</b>	<b>Study Participants (n=24)</b>
<b>Age (years)</b>	<b>Mean=29.5, 18–42</b>
	N (%)
<b>Region</b>	5 (21%)
Russia (outer regions)	5 (21%)
Eastern Europe	12 (50%)
Central Asia	2 (8%)
Caucuses	
<b>Education</b>	
University	5 (21%)
College	7 (29%)
High school	11 (46%)
Incomplete High School	1 (4%)
<b>Children</b>	
None	12 (50%)
1	5 (21%)
2–3	7 (29%)
<b>Years in Sex Work</b>	
<1yr	4 (17%)
1–3yrs	13 (54%)
>3 yrs	3 (13%)
>5 yrs	4 (17%)
<b>Reasons for Sex Work</b>	
Could not find a job	11 (46%)
Lost job	4 (17%)
Inadequate income	6 (25%)
Change of career	7 (29%)
<b>Place of Sex Work</b>	
Own apartment	12 (50%)
Clients' apartment	16 (67%)
Bazaar	4 (17%)
Third location	6 (25%)
Tochka	1 (4%)
Construction site	1 (4%)
<b>Means of Finding Clients</b>	
Self	17 (71%)



Variable	Study Participants (n=24)
Age (years)	Mean=29.5, 18-42
Hire help	2 (8%)
Use referrals	2 (8%)
Have a handler	3 (13%)