The influence of having children on HIV-related risk behaviors of female sex workers and their intimate male partners in two Mexico–US border cities

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Summary

Among female sex workers who use drugs, the experience of having children and its effect on HIV risk behaviors remains underexplored. We draw from a study of 214 female sex workers and their intimate non-commercial partners in Tijuana and Ciudad Juárez, México (n = 428), approximately 30% of whom have children living with them. During qualitative interviews with 41 of these couples, having children emerged as an important topic. Children influenced partners’ lives and HIV-related risk behaviors in positive and negative ways. Couples perceived that children strengthened their relationships. Concern for children’s well-being motivated couples to contemplate healthier lifestyle changes. However, childrearing costs motivated sex work and structural constraints prevented couples from enacting lifestyle changes. Case studies illustrate these themes and highlight implications for couple- and family-based harm reduction interventions. Specifically, our results suggest a need for economic alternatives to sex work while working with families to develop risk reduction skills.

Key words: children, couple-based research, female sex workers, HIV, Mexico.

Introduction

Female sex workers (FSWs) experience multiple occupational harms [1], including increased exposure to violence, HIV and sexually transmitted infections (STIs) [2]. Sex work harms are often compounded by drug abuse and economic disempowerment [3–5]. Nevertheless, despite the risks, many women in resource-poor settings trade sex to support themselves and their families [6–8].

Globally, many FSWs are mothers. Although exact estimates have not been published [9], fertility among FSWs is likely similar to that of general populations [10]. It is widely recognized that the health status of children of marginalized populations is linked to their parents’ health and well-being [9,11,12]. Documented harms experienced by FSWs’ children include poverty, violence, substance abuse and HIV [7,13]. Although limited research suggests that children play a role in the emotional quality of FSWs’ intimate relationships and family life [14,15], the experience of having and caring for children among drug-involved FSWs has not been explored in relation to parents’ HIV/STI risk.
Increasingly, HIV/STI prevention researchers are calling for studies that look beyond the individual level to examine intimate relationships, families and social networks [16]. Research has started to investigate how intimate relationships (e.g. with husbands, boyfriends) contribute to FSWs’ risk. For example, FSWs are less likely to use condoms with non-commercial than commercial partners [17, 18]. Among injecting couples, intimate relationships also influence each partner’s drug use and related risk (e.g. through syringe sharing) [19, 20]. Within this context, we examined how having children influenced the HIV/STI risk of drug-involved FSWs and their intimate partners in Tijuana and Ciudad Juárez, Mexico, to inform interventions.

Methods

Setting
Sex work is socially and legally tolerated in Mexico–US border cities [21]. Sex work is common in Tijuana, Baja California, and Ciudad Juárez, Chihuahua (adjacent to San Diego, CA, and El Paso, TX), the two largest cities. HIV prevalence among FSWs in these cities rose from <1% in the 1990s to ~6% in 2006 [21] and is higher among FSWs who inject drugs at 12.3% [22]. STI prevalence is also high (i.e. gonorrhea 6%, chlamydia 13% and active syphilis 14%) [23]. Drug abuse and injection drug use, which exacerbate HIV/STI transmission, are increasingly common due to drug trafficking through these cities [24]. Although numerous studies have described the health of adult FSWs in the region [25], few have focused on their intimate relationships, families or children.

Study design and population
We drew from a mixed-methods study of HIV/STI risk among FSWs and their intimate non-commercial male partners in Tijuana and Juárez. As previously described [26], eligible FSWs were ≥18 years old, had intimate male partners for ≥6 months, reported sex with intimate partners and clients in the past month and reported lifetime drug use. Male partners were ≥18 years old and in verified relationships with eligible FSWs. Enrolled couples provided written informed consent for all study procedures, which were approved by the institutional review boards of the University of California, San Diego, the Tijuana General Hospital, El Colegio de la Frontera Norte, and the Universidad Autónoma de Ciudad Juárez.

Data collection
From 2010 to 2011, the entire cohort (214 couples; 106 in Tijuana, 108 in Juárez) completed interviewer-administered quantitative surveys measuring socio-demographics, relationship factors and risk behaviors. In 2010, we conducted individual (n = 82) and joint (n = 41) qualitative interviews with 41 of these couples to explore relationship contexts (123 total interviews). Topics covered relationship histories and contexts, finances, sex, sex work and drug use. Case study details are based on the first three authors’ fieldwork in Tijuana during the initial 2 years of the study and provide a longitudinal view of the shifting hardships that FSW couples confront in raising children. Names were changed to protect identities.

Data analysis
Descriptive statistics from quantitative interviews provided frequencies for overall sample characteristics. Qualitative interviews were digitally recorded, transcribed and translated from Spanish into English [27]. Grounded theory guided qualitative analysis [28], beginning with a collaborative code-book development process. Briefly, we constructed an initial codebook [29] of key topics and emergent themes [30]. We discussed and refined initial codes, independently applied codes to identical texts to assess consistency in our code application and discussed and resolved discrepancies. Four bilingual analysts applied finalized codes, recorded memos about important findings and discussed cross-cutting themes (e.g. how having children might influence parents’ risk behaviors) [31]. We selected representative quotes and case studies to illustrate key findings.

Results

Sample characteristics
Among 214 couples in the cohort (n = 428), median age was 35 years [interquartile range (IQR): 29–42], and relationship duration was 3 years (IQR: 2–6; Table 1). Most participants had had children (84%), but 30% had children aged <18 years living with them. Children living with participants were a median of 6 years old (IQR: 2–10). Women’s primary earnings were obtained through sex work, and 30% of male partners reported being financially dependent on their female partners. Recent drug use was common, and 60% of partners injected drugs within 6 months before the survey.

Key findings
Demographic and risk behavior profiles of the 41 couples who completed qualitative interviews (n = 82) were similar to those of the overall cohort, with one-third having children aged <18 years living with them (n = 26). The experience of having children emerged as an important theme. Children appeared to influence participants’ life choices and HIV/STI risks in both positive and negative ways (Table 2). First, children profoundly shaped couples’ intimate relationships (e.g. ‘reinforcing’ relationships, helping
partners stay together). Second, some couples’ concern for their children’s safety and well-being motivated them to contemplate or initiate healthier physical and social lifestyle changes (e.g. reducing drug use, finding alternatives to sex work). However, basic childrearing costs (e.g. for food, diapers and education) also motivated women to initiate or continue engaging in sex work, carrying direct implications for their HIV/STI risk. The following case studies illustrate these major themes and further highlight structural vulnerabilities affecting couples’ and children’s health and well-being.

**Case studies**

**Case 1.** Pilar and Manuel are heroin injectors in their early 40s and have been together for 3 years. During her pregnancy, Pilar quit using drugs and endured drug withdrawal so that the baby would not be ‘born sick’ and she could set aside her earnings for future childrearing and education costs. Although her sex work created conflict in their relationship, having a son reinforced their bond ‘in ways we never thought would happen’. Manuel had been deported from USA, but they planned to move back to USA eventually to reunite with his family and provide ‘chaparrito’ (their son) with a better education. Unfortunately, Manuel passed away due to multiple health problems before they could move. After his death, Pilar continued sex work to support herself and her son, which was additionally complicated without childcare. Pilar described forgoing condoms with insistent male clients to earn extra money, and she continues to use drugs. Although pregnancy helped Pilar initiate healthier lifestyle changes, the unexpected loss of her partner has reconfigured her risk in new ways.

**Case 2.** Adrian and Isabela are in their 30s and have been together for 7 years. They have three young children, including an infant, who live with them. With limited education and job opportunities, Adrian resorts to *jales* (hustles), including stealing. Isabela solicits sex work clients on the street. She explained that she ‘wouldn’t go out’ for sex work if Adrian had a steady job to provide for their housing and food: ‘I don’t ask you for much, no luxuries or stuff’. Adrian acknowledges that having a stable job would benefit the family and allow Isabela to ‘retire’ from sex work, but he has not been able to find legitimate work. The economic stress and anxiety surrounding the repercussions of his illegal activities creates tension in their relationship, leading them through a cycle of breaking up but getting back together for their children’s sake.

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**TABLE 1**

*Sample characteristics from quantitative surveys with 214 female sex workers and their intimate male partners in Tijuana and Ciudad Juárez, Mexico (n = 428; 214 couples)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%) or Median (interquartile range)</th>
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<tbody>
<tr>
<td><strong>Socio-demographics</strong></td>
<td></td>
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<tr>
<td>Age in years</td>
<td>35 (29–42)</td>
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<tr>
<td>Educational attainment in years</td>
<td>7 (6–9)</td>
</tr>
<tr>
<td>Born in study site vs. elsewhere</td>
<td>199 (47%)</td>
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<tr>
<td>Income &lt;$200 per month</td>
<td>186 (43%)</td>
</tr>
<tr>
<td>Male partner is financially dependent on FSW-partner’s income</td>
<td>128 (30%)</td>
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<tr>
<td>Relationship duration in years</td>
<td>3 (2–6)</td>
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<tr>
<td>Married/union libre</td>
<td>421 (98%)</td>
</tr>
<tr>
<td><strong>Children</strong></td>
<td></td>
</tr>
<tr>
<td>Has ever had children</td>
<td>358 (84%)</td>
</tr>
<tr>
<td>Number of children (among 358 who ever had children)</td>
<td>2 (2–4)</td>
</tr>
<tr>
<td>Has children aged &lt;18 living with participant</td>
<td>127 (30%)</td>
</tr>
<tr>
<td>Number of children aged &lt;18 living with participant (among 127 who have children aged &lt;18 living with them)</td>
<td>1 (1–2)</td>
</tr>
<tr>
<td>Age of children living with participant in years</td>
<td>6 (2–10)</td>
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<tr>
<td><strong>Risk behaviors</strong></td>
<td></td>
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<tr>
<td>Used heroin, past 6 months</td>
<td>267 (62%)</td>
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<tr>
<td>Used cocaine, past 6 months</td>
<td>85 (20%)</td>
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<tr>
<td>Used crack, past 6 months</td>
<td>59 (14%)</td>
</tr>
<tr>
<td>Used methamphetamine, past 6 months</td>
<td>134 (31%)</td>
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<tr>
<td>Injected any drugs, past 6 months</td>
<td>256 (60%)</td>
</tr>
<tr>
<td>Number of male clients in a typical week (among 214 FSWs)</td>
<td>8 (4–15)</td>
</tr>
<tr>
<td>Uses condoms often/always for vaginal sex with male clients (among 214 FSWs)</td>
<td>119 (56%)</td>
</tr>
</tbody>
</table>
**Case 3.** Mildred and Ronaldo are in their mid-40s and have been together since she became pregnant with Consuelo, their now 8-year-old daughter. Due to their inability to pay hospital bills for her birth, they never obtained a birth certificate and could not enroll her in social services. Mildred injects heroin, whereas Ronaldo smokes methamphetamine, two drugs with divergent effects that stresses the stability of their relationship. Both partners said they have stayed together for the welfare of Consuelo. Yet Ronaldo worries that his concern for Consuelo is greater than Mildred’s, whose heroin addiction takes priority: ‘I would rather be without drugs than leave the girl without her food...’[Mildred] doesn’t care’.

Longstanding concerns that their drug abuse would result in losing Consuelo materialized when municipales (police) came to their house, a known picadero (place where people inject drugs), to elicit information about a suspect. The police threatened Ronaldo that they would take Consuelo unless he cooperated. Unable to provide the information, the police directly relocated Consuelo to social services, a process that is uncustomary in Mexico. To regain custody, parents must submit to regular drug testing. Positive drug tests for mothers result in mandatory drug rehabilitation, but penalties for fathers are often less severe. Mildred and Ronaldo conspired to purchase clean urine samples from someone else for her tests, whereas he agreed to test positive to avoid raising suspicion. In doing so, he was assigned to parenting classes and ‘personal reconstruction’ counseling designed to reform him into a ‘fit parent’. While navigating this system and enduring a stressful separation from Consuelo, both partners’ drug use escalated.

### Table 2

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Summary of findings</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Having children impacts intimate and family relationships</strong></td>
<td>For some couples, having children strengthened or improved the quality of their intimate relationships or brought them back together. For other couples, having children helped partners build new plans for the future.</td>
<td>‘During (our separation), I’d come visit each week…more than anything for the kids, and I’d tell her, “I’m going to keep coming to see my kids,” and she saw that, and then one day she told me, “You know what? You better stay here.” And we got together’.—Cd. Juárez male partner, age 35, smokes marijuana.</td>
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<td><strong>Concern for children’s well-being motivates (interest in) behavior change</strong></td>
<td>Having children motivated some couples to decrease their HIV-related risk behaviors and initiate physical and social lifestyle changes (e.g. moving to safer places, finding alternatives to sex work, initiating drug cessation). Immediate challenges of poverty and addiction prevented some couples from acting on their desire to initiate lifestyle changes to protect their children. Some participants did not feel that were able to create a safe, protective environment and wanted to send their children elsewhere.</td>
<td>‘We want to unify our family, we want our children to stay in school, our marriage to continue to grow, for it to continue to strengthen, for us to remain united, without addictions and yeah, I see him with a new job, I see him with a different life, like in all aspects’.—Cd. Juárez couple, ages 36 and 38, recovering drug users.</td>
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<tr>
<td><strong>Childrearing costs are important and motivate sex work</strong></td>
<td>In light of few economic alternatives, sex work was necessary to pay for children’s expenses, even when children lived with relatives. Many men were irregularly employed and reluctantly accepted female partners’ sex work for supporting children.</td>
<td>‘Now that he asked me (to get married), I’m even more motivated…Now I will show (my children) that I won’t die with the syringe, like they say, in the vein...I will die, but as a señora de la casa (homemaker, with dignity)’.—Tijuana FSW, age 45, injects heroin.</td>
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Discussion

For FSWs in Mexico–US border cities, having children profoundly shapes intimate relationship dynamics. In our sample, children often kept couples together for material support and brought some partners closer emotionally. Importantly, concern for children’s safety and well-being motivated lifestyle changes, including reduced drug use. Couple- and family-based interventions should capitalize on this positive impact of childrearing [9]. Channeling the energy that couples devote toward improving children’s lives may help service providers develop and negotiate risk reduction plans that benefit entire families.

However, FSWs and their partners faced extraordinary structural vulnerabilities that often hindered their ability to enact desired lifestyle changes. As illustrated in all three case studies, childrearing costs and limited legitimate economic opportunities led couples to rely on sex work earnings. Although culturally appropriate relationship and family counseling, including the development of parenting skills, may benefit some couples [32], our findings highlight the need for structural interventions to also address economic challenges by creating alternatives to sex work for women and providing training in specific job skills for women and men [33]. Safe and affordable childcare is also needed to enable parents’ full workforce participation.

Compounding economic hardship, couples faced other institutional challenges. As exemplified in the third case study, parents’ deficient financial resources may exclude children from health, education and other social services, likely limiting their future opportunities. Couple- and family-based interventions for FSWs must be sensitive to the broader set of challenges that drug-involved couples face, including navigating the very social services that are designed to help them [8]. Of particular importance is the provision of drug treatment services that are sensitive to childrearing needs and do not completely separate families during recovery [34, 35]. For many couples in our study, drug treatment access was also limited by partners’ lack of social support and childcare and fears of losing custody.

Our study has limitations, including the focus on drug-involved FSWs in stable, intimate relationships; our results may not generalize to other sex workers’ experiences. Moreover, qualitative data were obtained from a larger study that was not designed to focus on children. Future research should systematically explore the influence of having children among FSW populations and investigate the health status and perspectives of children themselves.

FSWs’ experiences of having children profoundly shaped their intimate relationship dynamics and HIV/STI risks. Prevention interventions should consider the broader contexts of couples’ risk and address the multiple challenges that they face in raising children. As our case studies illustrate, understanding the complexity of couples’ situations is key to addressing their needs and improving the health of entire families.

References

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