Structural Determinants of Health Among Women Who Started Selling Sex as Minors in Burkina Faso

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Objectives: To explore the prevalence of and factors associated with initiation of selling sex as a minor.

Design: Data were drawn from cross-sectional studies of adult female sex workers (FSW) recruited through respondent-driven sampling in Ouagadougou and Bobo-Dioulasso, Burkina Faso.

Methods: FSW completed a questionnaire that included a retrospective question regarding the age at which they started selling sex. Separate multivariate logistic regression analyses were conducted for each city to examine associations with initiation of selling sex as a minor (<18 year old), controlling for current age.

Results: Of study participants, 27.8% (194/698) reported selling sex as a minor, ranging from 24.4% (85/349) in Bobo-Dioulasso to 31.2% (85/279) in Ouagadougou. In Ouagadougou, early initiates were more than twice as likely to report someone ever forced them to have sex [age-adjusted odds ratio (aaOR): 2.54, 95% confidence interval (CI): 1.53 to 4.23]. In Bobo-Dioulasso, those who started as minors were more likely to report someone ever tortured them (aaOR: 2.29, 95% CI: 1.28 to 4.10). In both cities, early initiates were more likely to not use a condom with a client if offered more money (Ouagadougou aaOR: 2.34, 95% CI: 1.23 to 4.47; Bobo-Dioulasso aaOR: 2.37, 95% CI: 1.29 to 4.36). In Ouagadougou, women who had started selling sex at a young age were half as likely to have been tested for HIV more than once ever (aaOR: 0.50, 95% CI: 0.26 to 0.94). In Bobo-Dioulasso, early initiates were less likely to attend HIV-related talks or meetings (aaOR: 0.56, 95% CI: 0.33 to 0.97).

Conclusions: A substantial proportion of FSW in Burkina Faso started selling sex as minors. The findings show that there are heightened vulnerabilities associated with selling sex below age 18 years, including physical and sexual violence, client-related barriers to condom use, and lower access to HIV-related services.

Key Words: adolescent, HIV, sex trafficking, sex work

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INTRODUCTION

Globally, young people (aged 15–24 years) are estimated to account for 41% of new HIV infections among adults of reproductive age (aged 15–49 years).1Nearly 80% of these new infections are among people living in sub-Saharan Africa (SSA).1 Young girls in SSA are more likely to be living with HIV than their male peers.1 Adolescent girls in SSA commonly report behaviors correlated with HIV, such as inconsistent condom use. For instance, in Nigeria, less than half of sexually active unmarried female adolescents (aged 15–19 years) reported they had ever used condoms.2 Social risks such as violence can also contribute to heightened vulnerability to the acquisition and transmission of HIV, and data exist that report violence among adolescent girls in SSA, as in other regions of the world. In Ghana, 30% of girls reported coercive experiences at sexual debut, including forced sex.3 In Liberia and Nigeria, 13% and 7% of girls, respectively, aged 15–19 years have experienced sexual violence. Despite these individual-level and structural-level risks for HIV, girls in SSA have limited access to sexual and reproductive health services. About 60% of unmarried, sexually active adolescent girls aged 15–19 years in SSA are not using a modern contraceptive method.4 Across countries, including Sierra Leone, Nigeria, Niger, Ghana, and Mali, more than 90% of girls aged 15–19 years have never received an HIV test.5,6 Concurrent with the challenges faced by girls in SSA are the vulnerabilities experienced by minors who sell sex throughout the world. Minors who sell sex are not defined as sex workers by the Joint United Nations Programme on HIV/AIDS.7 Some studies have asked adult female sex workers (FSW) retrospective questions about when they started selling sex. FSW who started selling sex as minors differ from those who started as adults in their sociodemographic characteristics, behavioral and social risks for HIV, and access to services. In demographics, FSW in North America who

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started selling sex as adults differ from those who started as minors in their education and migration status. Studies from multiple settings have shown that women who started selling sex before the age of 18 years are more likely to have HIV than those who started as adults. Behaviors associated with HIV, such as inconsistent condom use with clients, have been shown to be more prevalent among those who started selling sex as minors compared to those who started as adults. The relationship between drug addiction and initiation of selling sex as a minor or an adult has varied in previous studies. In addition to individual-level risks for HIV, FSW who started selling sex as minors are susceptible to social and structural risks, including violence. Multiple studies have found that FSW who were physically or sexually abused as children were likely to have started selling sex at younger ages. Despite the vulnerabilities associated with selling sex as a minor and the risks faced by girls in SSA, there have been relatively few studies of girls who sell sex in SSA compared to the number of studies on this topic in Asia and the Americas.

In West and Central Africa (WCA), where HIV is concentrated among key populations such as FSW, an investigation into the experiences of girls who sell sex is particularly warranted. Pooled HIV prevalence among FSW in WCA is estimated to be 34.9%. An estimated 330,000 female adolescents between the ages of 10 and 19 years in WCA are living with HIV. The commercial sexual exploitation of children and child sex trafficking have also been reported in the WCA region. Burkina Faso is a country in West Africa bordered by Ghana, Benin, Togo, Cote d’Ivoire, and Mali. Pooled HIV prevalence among FSW in Burkina Faso was found to be 45.8% in a systematic review of research from the region. Demographic and Health Survey data indicate that 0.9% of girls aged 15–19 years in Burkina Faso are living with HIV. There are several behavioral and social factors that may contribute to HIV acquisition among these girls in Burkina Faso. In the country, 61.2% of women aged 18–24 years reported they had sexual intercourse before the age of 18 years. Among girls aged 15–19 years, 36.8% had sex with a nonmarital noncohabitating partner in the past 12 months, including 3.6% who had multiple sex partners. In the same study, 46.4% used a condom at last sex with a nonmarital noncohabitating partner. Knowledge related to HIV among those aged 15–19 years is low in Burkina Faso: 54.7% of girls knew that limiting sexual intercourse to 1 uninfected partner could reduce the risk of HIV, and less than half (45.5%) knew that using condoms could reduce the risk. Additionally, access to sexual and reproductive health services is low. Only 44.3% of girls knew a source of obtaining condoms, and around 95% of sexually active girls had never received an HIV test. In addition to behavioral risks and poor access to services, girls in Burkina Faso also face social risks such as violence. For example, 15% of girls reported coercive experiences at sexual debut.

Burkina Faso is a source, destination, and transit country for sex trafficking of adults and children. This includes multiple definitions of trafficking: minors who sell sex but do not consider themselves to have been forced, minors who are forced to sell sex, and adults who are forced to sell sex. Commercial sexual exploitation of Burkinabe children within Burkina Faso has also been reported. A study was conducted with 243 girls between the ages of 13 and 17 years who sold sex in Ouagadougou. More than half had higher than a primary school education. The death of 1 or both parents was cited as a reason for selling sex by 15.6% of the sample. The majority (62.6%) reported their nationality as Burkinabe. About 7% lived outside of Burkina Faso before coming to Ouagadougou. Less than 2% had been forced to sell sex by a pimp or someone else. Condom use was more common compared to adolescent girls in Burkina Faso in general. More than 90% of the sample always used condoms with clients. Among those who did not always use condoms, about one third said the reason was because the client refused. Access to HIV testing was high compared to girls in Burkina Faso in general, but contraceptive use was low. More than 80% had ever been tested for HIV. Slightly more than one quarter used contraceptive methods other than condoms. More than 30% had an unwanted pregnancy before they started selling sex. The study participants also had experiences with sexual violence. More than one quarter had been sexually abused before they started selling sex. The proportion of FSW who started selling sex below the age of 18 years in Burkina Faso and the extent to which their experiences differ from those of women who started selling sex as adults are unknown.

Given the vulnerabilities associated with selling sex as a minor, the high HIV prevalence among FSW in Burkina Faso, and the risks reported by adolescent girls who sell sex in Burkina Faso, the objective of this study was to investigate the structural determinants of health associated with the start of selling sex as a minor among FSW in Burkina Faso.

**METHODS**

**Data Collection**

In Ouagadougou and Bobo-Dioulasso, Burkina Faso from January to July 2013, FSW were recruited through respondent-driven sampling (RDS). This method was selected to collect rigorous, representative data from a hard-to-reach population. Ten “seeds” (7 in Ouagadougou and 3 in Bobo-Dioulasso) representing different ages, education levels, marital statuses, languages, and HIV statuses, and who met eligibility criteria, were selected to begin peer recruitment. FSW whose gender assigned at birth was female, who were at least 18 years old, obtained the majority of their income in the past 12 months from selling sex, lived in the study city for the past 3 months, had a valid RDS coupon, and provided written informed consent in French or local language (Moore, Dioula, etc.) were eligible to participate. Participants completed an interviewer-administered questionnaire, received pretest and posttest HIV counseling, and were tested for HIV and syphilis. They received male condoms, condom-compatible lubricants, HIV education materials, and information regarding existing services. Each participant also received 2000 XOF (currency code for the West African CFA franc; about 4 USD) for transportation reimbursement for each study visit and 1500 XOF per peer (for up to 3 peers) recruited to be part of the study. The Johns Hopkins University School of Hygiene and Public Health financed the study. The study protocol was approved by the Institutional Review Board for the Ethical Review of Research Involve...
Participants were also asked, “In the last 12 months, have you had anal sex?” To assess risks related to sexual behaviors with clients, participants were asked, “In the last 12 months, have there been more people brought to have sex with you than what had been discussed with the client?” Client removal of condoms was assessed by a question that asked, “In the last 12 months, has a client agreed to have sex with a condom but then removed it or declined later?” Participants who answered “Yes, in the last 12 months” or “Yes, but not in the last 12 months” were grouped together for the analysis. We assessed whether participants had sex without a condom because a client offered more money based on a question that asked, “Now think about the last time a condom was not used when you had vaginal or anal sex with a new client. Why wasn’t a condom used at that time? I will read some possible reasons, and for each one please tell me whether that reason applies to your situation or not.” Participants could choose more than 1 reason. The variable was coded as 1 for who answered “yes” to “The client offered more money not to use a condom.” A similar question was asked about regular clients who offered more money not to use a condom. Condom negotiation difficulty was measured by the question, “In general, how difficult or easy is it for you to use or suggest using a condom with a regular client?” The 5 response options ranged from “very difficult” to “very easy.”

Torture was assessed by the question, “Have you ever been tortured by someone?” The definition of torture was left to participants’ interpretation. Forced sex was measured by a question that asked, “Have you ever been forced to have sex when you did not want to? (By forced, I mean physically forced, coerced to have sex, or penetrated with an object, when you did not want to).”

Participation in HIV-related talks or meetings was assessed by a question that asked, “In the last 12 months, have you participated in any talks or meetings about HIV/AIDS?” Uptake of HIV testing was assessed by the question, “Have you ever been tested for HIV infection?” Responses included “No,” “Yes, once,” and “Yes, more than once.” Unwanted pregnancy (among those who reported they had ever been pregnant) was measured by the question, “Have you ever had a pregnancy that was unwanted/ unplanned? What I mean by that is, at the time when you found out you were pregnant, you did not want or intend to be pregnant then.”

Statistical Analyses

Women who self-reported they started selling sex for money before age 18 years were compared with those who started at age 18 years or older using χ² statistics for categorical variables and t tests for continuous variables. Variables that were significantly related to involvement in selling sex before age 18 years in the bivariate analysis (P < 0.05) were considered for inclusion in multivariate analyses. Separate multivariate logistic regressions were conducted for each city to examine correlates of the start of selling sex below age 18 years. Because previous studies of adult FSW found that at the time they completed the questionnaire, those who started selling sex as minors were significantly younger...
than those who started as adults, we controlled for age at the
time of the questionnaire. Control variables other than age were
not adjusted for because the intention was to assess the
relationship independent of age of many factors related to
early initiation of selling sex rather than to measure direct
paths through which early initiation of selling sex is related to
risks. Separate models examined the age-adjusted relationship
between each covariate and early initiation of selling sex. All
estimates reported are not RDS-weighted. Analyses were
conducted using Stata 13.1 (Statacorp, College Station, TX).

RESULTS

Demographics

As shown in Table 1, the mean age at the time of the
questionnaire was lower among early initiates (21.7 years
in Ouagadougou and 25.0 years in Bobo-Dioulasso) than later
initiates (26.4 years in Ouagadougou and 32.6 years in Bobo-
Dioulasso). Less than half of participants completed primary
school or higher. Education levels were higher among those
who started selling sex as adults compared to those who
started as minors in Ouagadougou (50.9% vs. 35.5%). In
Bobo-Dioulasso, a greater percentage of women who started
selling sex as minors reported that 1 or both of their parents
had died. In Ouagadougou, after adjusting for age, early
initiates were more than twice as likely to report both of their
parents had died compared to later initiates. About one fifth
of women in both cities were born outside Burkina Faso (28.9%
in Ouagadougou and 17.8% in Bobo-Dioulasso), and women
who started selling sex as adults were more likely to be from
another country. The percentage of FSW participants who
started selling sex as minors was 31.2% in Ouagadougou and
24.4% in Bobo-Dioulasso. Among early initiates, the mean
age of starting was 15.9 years in Ouagadougou and 15.7 years
in Bobo-Dioulasso, whereas among later initiates, the mean
age of starting was 22.2 years in Ouagadougou and 25.6 years
in Bobo-Dioulasso. In both cities, the mean number of years
selling sex did not significantly vary between those who
started at older or younger ages.

Vulnerabilities Associated With Selling Sex Below Age 18 Years

Women who started selling sex as minors were more
likely to report behavioral risk factors for HIV and sexually
transmitted infection such as anal sex in the past 12 months
[Ouagadougou age-adjusted odds ratio (aaOR): 2.44, 95%
confidence interval (CI): 1.32 to 4.51]. They were more likely
to report barriers to condom use. For example, early initiates
were more likely to report clients removed condoms (Oua-
gadougou aaOR: 1.83, 95% CI: 1.11 to 3.01; Bobo-Dioulasso
aaOR: 2.34, 95% CI: 1.35 to 4.08), FSW who started selling
sex as minors were more likely to report the last time they did
not use a condom with a new client (Bobo-Dioulasso aaOR:
3.04, 95% CI: 1.53 to 6.05) or a regular client (Ouagadougou
aaOR: 2.34, 95% CI: 1.23 to 4.47; Bobo-Dioulasso aaOR:
2.37, 95% CI: 1.29 to 4.36) was because the client paid more
not to use a condom. In Bobo-Dioulasso, early initiates were
d charged for HIV-related services, including talks or meetings (Bobo-
Dioulasso aaOR: 0.56, 95% CI: 0.33 to 0.97) or have been
tested for HIV multiple times ever (ouagadougou aaOR:
0.50, 95% CI: 0.26 to 0.94) (Table 2).

DISCUSSION

Although several studies comparing early and later
initiation of selling sex have been conducted in Asia and the
Americas, our study is one of the first studies on this topic in the
West African context. In this study, 27.8% of FSW study
participants sampled in Ouagadougou and Bobo-Dioulasso,
Burkina Faso started selling sex as minors. This is consistent
with studies from other countries that have found between 10%
and 40% of FSW initiated selling sex before age 18 years.
Compared to later initiators, early initiators had less education
and were more likely to be orphaned. Those who started selling
sex as minors had more behavioral risk factors for HIV,
including client-related barriers to condom use. They also were
more likely to experience social and structural vulnerabilities,
including limited access to health services and violence. Women
who started selling sex as minors were more likely to have been
forced or pressured to sell sex but were less likely to have been
born outside Burkina Faso.

In Ouagadougou, FSW who started selling sex as minors
were more likely to report both their parents had died. As in
other studies, education level was negatively related to selling
sex as a minor. Taken together, these findings suggest that
orphans and vulnerable children, including those who have
dropped out of school, may be at heightened risk for selling sex
during adolescence and experiencing the associated negative
effects of this situation. Interventions elsewhere in SSA such as
cash transfers and social support have been shown to reduce
transactional sex among adolescent girls and could be
considered for the prevention of the commercial sexual
exploitation of girls in Burkina Faso.

The findings from the present study that only about one third of FSW who started
selling sex as minors had completed primary school or higher
contrast with findings from a previous study of girls who sold
sex in Ouagadougou in which more than half had higher than
a primary school education. This may imply that girls with
higher education levels who sell sex as minors may be more
able to stop selling sex as adults through means such as finding
alternative employment than those with lower education levels.

A previous study of minors who sell sex in Burkina Faso
found that nearly all participants always used condoms with
clients. However, in the present research, as studies in Asia12
and North America15 have found, selling sex as a minor in
Burkina Faso was associated with challenges in using condoms

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<table>
<thead>
<tr>
<th>Sociodemographics</th>
<th>Ouagadougou</th>
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<th>Bobo-Dioulasso</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Sample, n = 349; % (n)</td>
<td>Started Before Age 18 Years, n = 109; % (n)</td>
<td>Started After Age 18 Years, n = 240; % (n)</td>
<td>P</td>
</tr>
<tr>
<td>Mean current age (minimum–maximum)</td>
<td>25.0 (18–55)</td>
<td>21.7 (18–48)</td>
<td>26.4 (18–55)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Completed primary school or higher</td>
<td>46.1 (159)</td>
<td>35.5 (38)</td>
<td>50.9 (121)</td>
<td>0.009</td>
</tr>
<tr>
<td>Parents’ death</td>
<td></td>
<td></td>
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<tr>
<td>Only 1 parent is living</td>
<td>37.5 (129)</td>
<td>36.2 (38)</td>
<td>38.1 (91)</td>
<td>0.547</td>
</tr>
<tr>
<td>Neither parent is living</td>
<td>11.9 (41)</td>
<td>9.5 (10)</td>
<td>13.0 (31)</td>
<td>0.249</td>
</tr>
<tr>
<td>Born outside Burkina Faso</td>
<td>28.9 (101)</td>
<td>21.1 (23)</td>
<td>32.5 (78)</td>
<td>0.030</td>
</tr>
<tr>
<td>Sex work characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Started selling sex as minors</td>
<td>31.2 (109)</td>
<td>100.0 (109)</td>
<td>0.0 (0)</td>
<td>N/A</td>
</tr>
<tr>
<td>Mean age of initiation of selling sex (minimum–maximum)</td>
<td>20.2 (12–50)</td>
<td>15.9 (12–17)</td>
<td>22.2 (18–50)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Mean number of years selling sex (minimum–maximum)</td>
<td>4.4 (0–30)</td>
<td>5.1 (0–30)</td>
<td>4.1 (0–30)</td>
<td>0.991</td>
</tr>
<tr>
<td>Forced, pressured, coerced, or talked into selling sex by someone</td>
<td>11.8 (41)</td>
<td>12.8 (14)</td>
<td>11.3 (27)</td>
<td>0.678</td>
</tr>
<tr>
<td>Share earnings with someone (e.g. pimp)</td>
<td>37.8 (130)</td>
<td>43.5 (47)</td>
<td>35.2 (83)</td>
<td>0.138</td>
</tr>
<tr>
<td>Had sex with clients in …</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Private home</td>
<td>42.1 (147)</td>
<td>44.0 (48)</td>
<td>41.3 (99)</td>
<td>0.625</td>
</tr>
<tr>
<td>Bar or club</td>
<td>9.7 (34)</td>
<td>14.7 (16)</td>
<td>7.5 (18)</td>
<td>0.036</td>
</tr>
<tr>
<td>Private party</td>
<td>2.0 (7)</td>
<td>1.8 (2)</td>
<td>2.1 (5)</td>
<td>0.878</td>
</tr>
<tr>
<td>Brothel</td>
<td>28.4 (99)</td>
<td>28.4 (31)</td>
<td>28.4 (68)</td>
<td>0.984</td>
</tr>
<tr>
<td>Street, park, or public garden</td>
<td>11.5 (40)</td>
<td>20.2 (22)</td>
<td>7.5 (18)</td>
<td>0.001</td>
</tr>
<tr>
<td>Private vehicle</td>
<td>14.9 (52)</td>
<td>22.9 (25)</td>
<td>11.3 (27)</td>
<td>0.004</td>
</tr>
<tr>
<td>Hotel or guest house</td>
<td>81.1 (283)</td>
<td>82.6 (90)</td>
<td>80.4 (193)</td>
<td>0.634</td>
</tr>
<tr>
<td>Other</td>
<td>31.2 (109)</td>
<td>31.2 (34)</td>
<td>31.3 (75)</td>
<td>0.991</td>
</tr>
</tbody>
</table>
TABLE 1. Characteristics and Unadjusted Factors Associated With Start of Selling Sex as a Minor Among Adult Female Sex Workers in 2 Cities in Burkina Faso

<table>
<thead>
<tr>
<th>Vulnerabilities related to selling sex below age 18 years</th>
<th>Ouagadougou</th>
<th>Bobo-Dioulasso</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample, n = 349; % (n)</td>
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<tr>
<td>Started Before Age 18 Years, n = 109; % (n)</td>
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<tr>
<td>Started After Age 18 Years, n = 240; % (n)</td>
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<tr>
<td>P</td>
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</tr>
<tr>
<td>Used noninjectable drugs in the past 12 months</td>
<td>15.3 (53)</td>
<td>19.4 (21)</td>
<td>13.5 (32) 0.151</td>
</tr>
<tr>
<td>Had anal sex in the past 12 months</td>
<td>22.8 (63)</td>
<td>36.3 (33)</td>
<td>16.2 (30) &lt;0.001</td>
</tr>
<tr>
<td>In the past 12 months, more people were brought to have sex than agreed upon with client</td>
<td>32.0 (111)</td>
<td>34.9 (38)</td>
<td>30.7 (73) 0.437</td>
</tr>
<tr>
<td>A client ever agreed to have sex with a condom but later removed it or declined</td>
<td>42.4 (147)</td>
<td>51.4 (56)</td>
<td>38.2 (91) 0.021</td>
</tr>
<tr>
<td>Did not use a condom last time because a new client offered more money</td>
<td>17.0 (55)</td>
<td>26.7 (28)</td>
<td>12.3 (27) 0.001</td>
</tr>
<tr>
<td>Did not use a condom last time because a regular client offered more money</td>
<td>17.6 (58)</td>
<td>26.0 (27)</td>
<td>13.7 (31) 0.007</td>
</tr>
<tr>
<td>Using or suggesting using a condom with a regular client is:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Somewhat easy</td>
<td>42.9 (149)</td>
<td>43.1 (47)</td>
<td>42.9 (102) 0.963</td>
</tr>
<tr>
<td>Very easy</td>
<td>25.9 (90)</td>
<td>19.3 (21)</td>
<td>29.0 (69) 0.055</td>
</tr>
<tr>
<td>Ever tortured by someone</td>
<td>30.8 (106)</td>
<td>35.5 (38)</td>
<td>28.7 (68) 0.205</td>
</tr>
<tr>
<td>Ever forced to have sex by someone</td>
<td>42.0 (146)</td>
<td>55.6 (60)</td>
<td>35.8 (86) 0.001</td>
</tr>
<tr>
<td>Attended talks or meetings about HIV in the past 12 months</td>
<td>29.9 (103)</td>
<td>31.8 (107)</td>
<td>29.1 (69) 0.618</td>
</tr>
<tr>
<td>Ever tested for HIV more than once</td>
<td>60.2 (209)</td>
<td>49.5 (54)</td>
<td>65.1 (155) 0.006</td>
</tr>
</tbody>
</table>

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TABLE 1. (Continued) Characteristics and Unadjusted Factors Associated With Start of Selling Sex as a Minor Among Adult Female Sex Workers in 2 Cities in Burkina Faso

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</tr>
</thead>
<tbody>
<tr>
<td>Unwanted pregnancy ever</td>
<td>50.4 (138)</td>
<td>45.8 (38)</td>
<td>52.4 (100)</td>
<td>0.317</td>
</tr>
<tr>
<td>Living with HIV</td>
<td>8.9 (31)</td>
<td>8.3 (9)</td>
<td>9.2 (22)</td>
<td>0.782</td>
</tr>
<tr>
<td>(according to biological test results)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with syphilis</td>
<td>4.3 (15)</td>
<td>6.4 (7)</td>
<td>3.3 (8)</td>
<td>0.187</td>
</tr>
<tr>
<td>(according to biological test results)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

with clients. FSW who establish patterns of unprotected sex with clients as minors because of limited ability to negotiate condom use may continue these behaviors in adulthood.

Women who started selling sex before age 18 years in this study were less likely to have ever tested for HIV more than once. Age of consent policies are potentially barriers to HIV testing among minors who sell sex. Conflicting information exists about minimum age of consent, parental permission, and disclosure of results to parents in Burkina Faso.\(^6\) The HIV Counseling and Testing Health Provider Reference Manual states that HIV testing may be conducted for those aged 14 years and above provided that they are sufficiently mature.\(^6\) Other sources state that the minimum age of consent for HIV testing in Burkina Faso is 18 years, parental consent is required for HIV testing of minors, and results must be disclosed to parents.\(^6,7\) Healthcare providers and minors may be unclear on what is permissible, which may limit provision or uptake of HIV testing. Minors who sell sex may not want to seek parental permission for HIV testing because of fear of disclosing their involvement in selling sex. Because those who started selling sex as minors were more likely to have been orphaned, parental consent for HIV testing before age 18 years may not have been an option. Additionally, laws related to the commercial sexual exploitation of children that are designed to protect minors may have the unintended consequence of limiting minors’ disclosure of involvement in selling sex to healthcare providers for fear of repercussions for themselves or their clients.

Violence was another structural risk factor experienced by those who started selling sex as children more than those who started as adults. Several studies from other regions have found childhood physical or sexual abuse was related to early initiation of selling sex.\(^5,6,11,12\) In Bobo-Dioulasso, compared to those who started selling sex as adults, FSW who started selling sex as minors were more likely to have experienced forced sex both before and after they started selling sex. This is consistent with an earlier study of girls who sold sex in Ouagadougou that found more than a quarter of participants had been sexually abused before they started selling sex.\(^43\) Experiencing violence has been shown in other settings to be associated with negative health-related behaviors, such as decreased ability to negotiate condom use.\(^49,50\)

The definition of trafficking encompasses coercing, moving, or harboring people for the purpose of exploitation.\(^51\) Trafficking related to selling sex includes exploitation of minors or forcing adults against their will.\(^51\) In this study, FSW who started selling sex as adults were more likely to have been born in another country than those who started as minors, consistent with studies from North America.\(^10\) In Burkina Faso, trafficking of both children (eg, from Nigeria\(^52\)) and adults is prevalent.\(^32\) In Bobo-Dioulasso, those who started as minors were more likely to say they were forced or pressured to sell sex than those who started as adults. This suggests an overlap in trafficking definitions. Minors and adults who are forced to sell sex against their will may require different interventions and services than those who start selling sex for other reasons such as lack of education or economic opportunities.\(^53\)

This study has some limitations. As the data are cross-sectional, causal inferences could not be made. Sample size was powered based on HIV prevalence but may not have been large enough to detect differences in HIV/sexually transmitted infection prevalence between those who started selling sex as minors and those who started as adults. The data are self-reported and may be subject to social desirability bias and recall bias. The sample included only FSW above the age of 18 years, so we cannot make inferences about girls who sell sex as minors and stop selling sex before age 18 years. Future studies in other countries in the WCA region with a lower minimum age of consent to receive health services and participate in research without parental permission may address this gap. Despite these limitations, this study adds information from an understudied region to the growing body of global literature on minors who sell sex.
TABLE 2. Age-Adjusted Comparisons of Factors Associated With Initiation of Selling Sex Before Age 18 Years Among Female Sex Workers in 2 Cities in Burkina Faso

<table>
<thead>
<tr>
<th></th>
<th>Ouagadougou, Burkina Faso; aaOR (95% CI)</th>
<th>Bobo-Dioulasso, Burkina Faso; aaOR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed primary school or higher</td>
<td>0.41 (0.24 to 0.68)*</td>
<td>0.78 (0.43 to 1.42)</td>
</tr>
<tr>
<td>Only 1 parent is living</td>
<td>1.24 (0.72 to 2.13)</td>
<td>0.81 (0.44 to 1.49)</td>
</tr>
<tr>
<td>Neither parent is living</td>
<td>2.60 (1.00 to 6.74)†</td>
<td>1.07 (0.50 to 2.28)</td>
</tr>
<tr>
<td>Had sex with clients in a bar or club</td>
<td>1.51 (0.71 to 3.21)</td>
<td>1.97 (0.45 to 8.55)</td>
</tr>
<tr>
<td>Had sex with clients in a street, park, or public garden</td>
<td>2.85 (1.38 to 5.92)‡</td>
<td>7.98 (1.84 to 34.51)‡</td>
</tr>
<tr>
<td>Had sex with clients in a private vehicle</td>
<td>2.23 (1.16 to 4.30)‡</td>
<td>3.85 (1.14 to 12.95)‡</td>
</tr>
<tr>
<td>Had sex with clients in a hotel or guest house</td>
<td>1.00 (0.53 to 1.90)</td>
<td>2.09 (1.19 to 3.66)‡</td>
</tr>
<tr>
<td>Had anal sex in the past 12 months</td>
<td>2.44 (1.32 to 4.51)‡</td>
<td>1.87 (0.94 to 3.71)</td>
</tr>
<tr>
<td>Client ever agreed to have sex with a client but later removed it or declined</td>
<td>1.83 (1.11 to 3.01)‡</td>
<td>2.34 (1.35 to 4.08)‡</td>
</tr>
<tr>
<td>Did not use a condom the last time because a new client offered more money</td>
<td>2.72 (1.40 to 5.30)‡</td>
<td>3.04 (1.53 to 6.05)‡</td>
</tr>
<tr>
<td>Did not use a condom the last time because a regular client offered more money</td>
<td>2.34 (1.23 to 4.47)‡</td>
<td>2.37 (1.29 to 4.36)‡</td>
</tr>
<tr>
<td>Using a condom with a regular client is somewhat easy</td>
<td>0.67 (0.26 to 1.74)</td>
<td>0.15 (0.05 to 0.50)‡</td>
</tr>
<tr>
<td>Very easy</td>
<td>0.62 (0.22 to 1.74)</td>
<td>0.15 (0.05 to 0.45)*</td>
</tr>
<tr>
<td>Ever tortured by someone</td>
<td>1.48 (0.87 to 2.51)</td>
<td>2.29 (1.28 to 4.10)‡</td>
</tr>
<tr>
<td>Ever forced to have sex by someone</td>
<td>2.54 (1.53 to 4.23)∗</td>
<td>1.58 (0.92 to 2.72)†</td>
</tr>
<tr>
<td>Attended talks or meetings about HIV in the past 12 months</td>
<td>1.19 (0.69 to 2.04)</td>
<td>0.56 (0.33 to 0.97)‡</td>
</tr>
<tr>
<td>Tested for HIV more than once ever</td>
<td>0.50 (0.26 to 0.94)†</td>
<td>0.80 (0.35 to 1.82)</td>
</tr>
<tr>
<td>Unwanted pregnancy ever</td>
<td>0.74 (0.42 to 1.29)</td>
<td>1.44 (1.08 to 1.94)‡</td>
</tr>
<tr>
<td>Living with HIV (according to biological test results)</td>
<td>0.68 (0.26 to 1.76)</td>
<td>0.97 (0.47 to 2.00)</td>
</tr>
</tbody>
</table>

Separate models were used to examine the age-adjusted relationship between each covariate and early initiation.

*P < 0.001.
†P < 0.01.
‡P < 0.05.

CONCLUSIONS
Results from this study indicate that underage selling of sex is prevalent in Ouagadougou and Bobo-Dioulasso, Burkina Faso. Selling sex below age 18 years in this setting is related to lower education, parents’ death, behavioral and social risks for HIV, and limited access to health services. These findings suggest the need to prevent the commercial sexual exploitation of children in Burkina Faso and provide services such as HIV testing specifically adapted for minors who sell sex or FSW who started selling sex during adolescence.

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REFERENCES

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