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Social and behavioral characteristics of gharwalis who operate brothels in the Ganga-Jamuna area of Nagpur, India

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Abstract

Nagpur is an industrial hub in Maharashtra, a state in Central India that has the second highest HIV prevalence in the country. Approximately 3000 brothel-based female sex workers (FSWs) are estimated to be working in Nagpur's Ganga-Jamuna red light district. The extent to which brothel madams, known as gharwalis, support HIV/STI prevention for FSWs has not been examined. The present study sought to identify personal, social, and behavioral characteristics of gharwalis in Nagpur as well as enhance our understanding of the gharwali's role in shaping the sexual practices of brothel-based FSWs. Thirty gharwalis participated in a survey that covered personal, social, behavioral, and environmental characteristics. Respondents ranged in age from 29 to 50 years ($M = 38.9$) and had worked as a gharwali for an average of 5.3 years; 80% had no formal education, 43% had never married and 30% were divorced or separated, and 93% earned money from their own sex work. Gharwalis managed an average of 4.2 FSWs (range 2 to 10). Overall, gharwalis reported positive attitudes toward condoms, promoted use of condoms by their FSWs with clients, taught FSWs how to use condoms, knew where to obtain condoms for free, and required HIV testing for their FSWs; however, levels of HIV prevention knowledge were low. Gharwalis also reported providing a range of support services to FSWs who lived in their brothels, including shelter, protection from drunk and aggressive clients and police, emotional support, caring and love, and health care. These data suggest the feasibility of involving gharwalis in brothel-based HIV prevention programs.

Introduction

Female sex workers (FSWs) are disproportionately represented in the HIV/AIDS epidemic in India. In 2007, FSWs had an HIV prevalence of 5.1% compared to 0.48% among all women attending antenatal clinics (AVERT.org, 2011).

The degree to which brothel madams support HIV/STI prevention efforts appears to vary depending on location and other factors. Ghose et al. (2011) reported that participation by madams in the highly successful Sonagachi HIV/AIDS Intervention Program (SHIP) in Kolkata, India was key to the program's success. By contrast, Basuki et al. (2002) reported that brothel managers in Indonesia actively discouraged FSWs from using condoms with clients. Huang et al. (2004) reported that constant monitoring by brothel managers in China limited FSWs' ability to negotiate condom use with their customers.

Overall, the evidence suggests that madams or managers play an important role in shaping the sexual risk environment of brothels in the developing world. The present study gathered

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data from a sample of 30 gharwalis (madams) who operated brothels in the red-light district of Nagpur, Maharashtra. This study sought to increase our understanding of these gharwalis' roles in shaping their FSWs' sexual practices.

Methods

The overall study design used a mixed-methods approach. Our US/Indian research team estimated that 30 in-depth qualitative interviews would be sufficient to achieve saturation of recurring themes. The quantitative data used in the present analysis were gathered in conjunction with qualitative interviews. Our sample of 30 gharwalis was recruited through time-location sampling. This approach has been used successfully to recruit hidden samples of MSM, ethnic minorities, FSWs, and clients of FSWs for HIV/STI surveillance (Magnani, Sabin, Saidel, & Heckathorn, 2005; Patterson et al., 2009; Patterson et al., 2008; Stueve, O'Donnell, Duran, San Doval, & Blome, 2001). During the first month, the field team mapped locations of brothels in the Ganga-Jamuna district, which was our sampling frame. The mapping exercise determined that the Ganga-Jamuna area is home to approximately 500 gharwalis and 3,000 FSWs residing in roughly 215 buildings. Following Stueve et al. (2001), the research team randomly selected five brothels each week. A specified number of days and times were randomly selected and those brothel locations were visited during specified times.

Potential participants who identified themselves as gharwalis were given a brief description of the study. Eligibility criteria were: 18 years of age or older; self-identified as a madam or gharwali; currently managing at least one woman involved in sex trading; and having worked as a gharwali in the Ganga-Jamuna district for at least one year. All participants provided informed consent before proceeding with the interview. All interviews were conducted during December, 2010. Gharwalis received approximately \$7 USD (320 rupees) for participating.

Measures

The gharwali interview covered a range of topics including socio-demographic factors, use of alcohol and illicit drugs, sex work history, current participation in sex work, attitudes toward condom use, living and working conditions in brothels, condom use policies, involvement in the negotiation of sexual activities between FSWs and clients, involvement in determining cost of client services, knowledge of HIV transmission factors, HIV/STI testing requirements for FSWs, income generated by FSWs services, interactions with law enforcement, characteristics of male clients, sexual-risk and substance-use behaviors of FSWs, and brothel-based services provided to FSWs. Interviews lasted an average of 40 minutes and were conducted in Hindi or Marathi.

Statistical analyses

Data were analyzed using descriptive statistics (i.e., percentages, mean, median, mode, standard deviation, range).

Results

Sample characteristics

See Table 1. Eighty percent of the sample reported having no formal education. Fifty-six percent had child(ren) under the age of 18 years living with them. All gharwalis reported income from operating a brothel. In addition, 93% reported personal income from engaging in sex work. The majority of gharwalis (87%) selected the highest monthly income category listed in the questionnaire, which was 3500 rupees or more (\$78 USD). Half of the sample

rated their current financial situation as good or extremely good. No gharwali reported being financially responsible for the sex workers who lived in her brothel. Ninety-seven percent of the sample reported having traded sex in their lifetimes. On average, gharwalis first traded sex at the age of 18.9 years (SD = 5.0, range 12–35). The most common reason for entering sex work (87%) was identified as “financial need.” Sixty-seven percent indicated that they consumed alcohol either “never” (27.8%) or “once a month or less often” (38.9%).

Description of brothels and sex workers

The women in our sample reported that they had been working as gharwalis for an average of 5.3 years (SD = 3.4, range 1–15 years). Eighty-seven percent of the sample lived in their brothel on a full-time basis. Only 10% owned the building that housed their brothel. On average, gharwalis paid 5448 rupees per month in rental fees (SD = 2546, median = 6000, range = 800–12,000). The number of sex workers living in the brothels ranged from 2 to 10 (M = 4.2, SD = 2.2). FSWs who currently lived in the brothels ranged in age from 15 to 40 years (M = 23.8, SD = 4.7). Ninety-three percent of gharwalis revealed that they required their sex workers to get tested for HIV/AIDS. Only two gharwalis reported knowing that they had an HIV-positive sex worker working in their respective brothels.

Gharwali involvement in brothel activities

All 30 gharwalis reported that sex workers in their brothels were required always to use condoms with clients. Only 10% of the sample indicated that they had ever told a sex worker to not use a condom so that a client would pay a higher fee. Sixty-seven percent of the gharwalis reported that they negotiated with clients over the type of sex that their FSWs would have with clients, while 50% reported that they negotiated prices for specific sex acts. Eighty-three percent of the gharwalis reported that they taught their FSWs how to put a condom on a male client. In the last month, the average number of male clients who paid for sexual services was 214 (SD = 179, median = 150, range = 10–800). The amount of money received by gharwalis for specific sex acts performed by the sex workers in their brothels is reported in Table 2. Seventy-seven percent of gharwalis reported that they always had condoms available in their brothel, and 93% reported that the sex workers had condoms in their rooms at all times. The level of HIV/AIDS knowledge among gharwalis was low. When asked to identify the ways in which HIV can be transmitted, the majority of gharwalis identified unprotected sex as a risk factor, but lacked knowledge regarding other major risk factors, including unprotected sex between men, mother to child transmission in utero, the sharing of injection equipment, and blood transfusions. Gharwalis' knowledge of sexually transmitted infections (STIs) other than HIV among their FSWs was also low. The only self-reported cases of STIs among brothel sex workers in the past six months were gonorrhea (n = 3), vaginal candidiasis (n = 1), and an unknown STI (n = 1). Two cases of tuberculosis among sex workers were also reported.

Gharwali services to sex workers

Gharwalis reported providing a range of support services to FSWs who lived in their brothel. The list of services included (in rank order): shelter (96.7%); protection from drunk and aggressive clients (96.7%); protection from police (96.7%); emotional support, caring and love (86.7%); health care (66.7%); other safety assurances (60.0%); money (30.0%); gifts, treats and travel (16.7%); and help with getting money to FSWs' dependents (13.3%).

Discussion

These findings enhance our knowledge of the Ganga-Jamuna district, where an estimated 3,000 FSWs live and work. Our data suggest that targeting madams for HIV prevention education and training them to teach safer sex skills to the FSWs in their brothels could be

an effective strategy for slowing the spread of HIV/STIs in this region. The fact that most gharwalis in our sample required their FSWs always to use condoms with clients, taught them to use condoms properly, had condoms available in brothel rooms at all times, and required FSWs to be tested for HIV suggests that they could be motivated to participate in brothel-based HIV prevention programs. Madams have been shown capable of facilitating changes in their FSWs' social norms. In Thailand, the success of the 100% condom program was determined largely by the brothel owners (Ainsworth, Beyrer, & Soucat, 2003).

Creating safe residences for FSWs may also attract more street workers into brothels. Previous research suggests that street workers are generally unwilling to work in brothels, where the madams have control and can force them to engage in risky sexual behaviors with clients (Ghose, et al., 2011). Thus, to be effective agents of change, brothel managers must offer services and features that motivate FSWs to seek employment there. The gharwalis in our sample met this criterion in several ways, in that they provided shelter, protection from aggressive clients and police, emotional support, caring and love, and health care.

Targeting gharwalis for HIV prevention programs may not be feasible in all brothels in Nagpur nor in other locations throughout India. It is likely that brothels in Nagpur have varied risk contexts. Within brothels, certain types of sex workers (e.g., younger, more attractive) may be treated differently by madams. For example, FSWs who are in greater demand may be required by their madams to perform riskier sexual acts because the financial payoff is greater.

This study has several limitations. The gharwalis who participated in our survey were volunteers and thus should not be considered representative. It is also likely that gharwalis who encourage or require FSWs to perform high-risk sexual practices with clients may have been less likely to participate in the survey. Also, given that brothels are often targets of law enforcement, it is possible that gharwalis under-reported sexual-risk and drug-use behaviors for both themselves and the FSWs in their brothels. Brothel sex workers were not interviewed, so gharwalis' reports regarding FSWs' attitudes and behaviors cannot be corroborated.

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Table 1

Background characteristics of gharwalis in Nagpur India (N = 30)

Variable	N (%) or Mean (SD)	Range
Age in years	38.9 (5.5)	29–50 years
Number of years of education completed	0.90 (1.9)	0–7 years
Number of years resident of Nagpur	21.9 (7.2)	10–36 years
<i>Primary language spoken</i>		
Hindi	12 (40.0%)	
Tulu	10 (33.3%)	
Marathi	3 (10.0%)	
Bengali	1 (3.3%)	
Other	4 (13.3%)	
<i>Marital Status</i>		
Married	2 (6.7%)	
Married but guana not performed	1 (3.3%)	
Not married (lives with partner)	9 (30.0%)	
Not married (does not live with partner)	4 (13.3%)	
Divorced	5 (16.7%)	
Separated	4 (13.3%)	
Widowed	3 (10.0%)	
Deserted	2 (6.7%)	
Has children	27 (90.0%)	
Number of children	1.96 (1.02)	1–5
<i>Monthly income in rupees over past six months</i>		
2500–2999	1 (3.3%)	
3000–3499	3 (10.0%)	
3500	26 (86.7%)	
Number of financial dependents	1.73 (1.78)	0–8
<i>Religious affiliation</i>		
Hindu	28 (93.3%)	
Muslim	2 (6.7%)	

Table 2

Amount of money paid to gharwalis by brothel sex workers based on type of sex act with clients

Money received by gharwalis from brothel sex workers			
Type of Sex	Mean (SD) (Median)	Range	N
Vaginal sex with a condom	118 (48) (100) Rupees <i>\$2.62 (\$1.07) (\$2.22)</i>	50–200 Rupees <i>\$1.11–\$4.44</i>	30
Anal sex with a condom	430 (170) (500) Rupees <i>\$9.56 (\$3.78) (\$11.11)</i>	200–700 Rupees <i>\$4.44–\$15.56</i>	10
Oral sex with a condom	410 (251) (400) Rupees <i>\$9.11 (\$5.58) (\$8.89)</i>	200–1000 Rupees <i>\$4.44–\$22.22</i>	10
Vaginal sex without a condom	380 (262) (300) Rupees <i>\$8.44 (\$5.82) (\$6.67)</i>	100–1000 Rupees <i>\$2.22–\$22.22</i>	10
Anal sex without a condom	567 (266) (500) Rupees <i>\$12.60 (\$5.91) (\$11.11)</i>	200–1000 Rupees <i>\$4.44–\$22.22</i>	6
Oral sex without a condom	571 (315) (500) <i>\$12.69 (\$7.00) (\$11.11)</i>	200–1000 Rupees <i>\$4.44–\$22.22</i>	7

Italicized amounts are in US dollars, based on an exchange rate of \$1 US = 45 Indian rupees, which was the average rate over the course of the interview period.