

A Descriptive Profile of Abused Female Sex Workers in India

Subadra Panchanadeswaran¹, Sethulakshmi C. Johnson², Sudha Sivaram³, A.K. Srikrishnan²,
Carla Zelaya³, Suniti Solomon², Vivian F. Go³, and David Celentano³

¹Adelphi University School of Social Work, 1 South Avenue, Garden City, New York, NY 11530, USA, ²YRG Centre for AIDS Research and Education, Voluntary Health Services Taramani, Chennai 600 113, India, and ³Bloomberg School of Public Health, Johns Hopkins University, 615 North Wolfe St., Baltimore, MD 21205, USA

ABSTRACT

This descriptive study presents the profiles of abused female sex workers (FSWs) in Chennai, India. Of 100 abused FSWs surveyed using a structured questionnaire, severe forms of violence by intimate partners were reported by most (98%) respondents. Of the total sample, 76% experienced violence by clients. Sexual coercion experiences of the FSWs included verbal threats (77%) and physical force (87%) by intimate partners and forced unwanted sexual acts (73%) by clients. While 39% of the women consumed alcohol before meeting a client, 26% reported that their drunkenness was a trigger for violence by clients. The findings suggest that there is an urgent need to integrate services, along with public-health interventions among FSWs to protect them from violence. Recognition of multiple identities of women in the contexts of intimate relationships versus sex work is vital in helping women to stay safe from adverse effects on health.

Key words: Descriptive studies; HIV; Spouse abuse; Violence; Violence against women; India

INTRODUCTION

Violence against women has emerged as a pervasive social problem and a public-health issue. Furthermore, violence is often perpetrated by intimate/cohabiting partners of women (1,2). Recent data indicate that the prevalence of physical and/or sexual intimate partner violence ranges from 15% to 71% globally (3). In the Indian context, patriarchal cultural norms and traditionally-prescribed gender roles intensify the vulnerability of women to violence (4-6). Recent data from the National Family Health Survey (NFHS 3) in India showed that 35.5% of married Indian women experienced physical violence with or without sexual violence from their husbands (7). Research has also documented the multiple forms of abuse reported by women in India, including psychological, verbal, physical, sexual, and economic (8-10). Abuse of wife in India has been associated with insufficient dowries (9,11), lower levels of male education and

poverty (12,13), premarital and extramarital sex (14), assertive behaviours of respondents (9), and men witnessing violence between parents (15). Violence against women impacts the health of women adversely, with consequences ranging from injuries, reproductive health problems, chronic and debilitating illnesses, to emotional distress and mental health problems (1,16-18), and, most recently, HIV/AIDS (7,19-23).

Violence against female sex workers (FSWs) has received inadequate attention from researchers and practitioners alike. Only recently, studies around the world have highlighted FSWs' experiences of harassment, physical violence, and rape in the context of HIV/AIDS research (24-32). Studies on FSWs in India have highlighted their multiple vulnerabilities stemming from independent solicitation of clients of street-based sex workers that places them at higher risks of violence, rape, and exploitation (33,34), inability to negotiate safe sex, and risk for sexually transmitted infections (STIs) and HIV (33-38), especially in the context of alcohol-use by males (39-41).

Much of the research on sex work in India and around the world has focused on HIV prevention, condom-use experiences, and interactions of FSWs with clients. There is little research that describes intimate relationships of FSWs, experiences of vio-

Correspondence and reprint requests should be addressed to:

Dr. Subadra Panchanadeswaran
Adelphi University School of Social Work
1 South Avenue, Garden City
New York, NY 11530
USA
Email:panchanadeswara@adelphi.edu
Fax: 516-877-4392

lence by intimate partners, and sexual coercion. FSWs have often been excluded from the mainstream discourses on women's experiences of violence in intimate relationships, possibly due to the assumption of higher risk for violence and adverse consequences from clients compared to intimate partners (42). Only recently, research evidence has underscored the many dimensions of intimate relationships of FSWs in India, ranging from relationships with 'regular' clients who provide emotional succour and financial support (42) to those who perpetrate physical and sexual violence (43). Also, while there is a significant body of research on experiences of intimate partner violence (IPV) among women in the general population, documentation of these experiences among FSWs is scanty. It is unclear if experiences of FSWs are similar to or different from women in the general population. Further, given the context of criminalization and stigmatization of sex work in India, FSWs who experience violence from partners or clients are unwilling to disclose or report the same to police or seek help (44). Some researchers have recently stressed the importance of recognizing multiple identities of FSWs (45), understanding individual contexts of women's lives in sex work (46), paying heed to FSWs' risk for HIV infection from not only clients but also non-commercial intimate partners (37,47-50). A recent study of 'Devadasis' (traditional form of sex work) in India underscored the significance of intimate relationships of FSWs with 'regular' clients who provide emotional succour, financial support, and share children (42).

The goal of this exploratory study was to gain an in-depth understanding of street-based female sex workers' experiences of violence in intimate and work spheres. Further, this study will contribute to existing extant literature on this issue and extend it by providing a holistic view of the contexts of street-based sex workers' differential experiences of violence from intimate partners/regular non-paying long-term partners, and violence from paying clients, including experiences of sexual coercion in India. Specifically, the objectives of the present study were to: (a) describe and compare FSWs' experiences of physical violence from clients and intimate partners; (b) outline the triggers for violent episodes, including alcohol-use; and (c) explore FSWs' experiences of threats and actual occurrences of sexual coercion from clients and intimate partners.

MATERIALS AND METHODS

Sample and recruitment

The study was nested within a five-country NIMH Collaborative HIV/STD Prevention Trial that seeks

to test the efficacy of HIV-prevention messages delivered through community popular opinion leaders (CPOLs). The CPOLs are influential individuals in local communities, who are approached by friends for advice and counselling (51). In India, the extensive formative research phase revealed two groups most at-risk for HIV infection: female sex workers and men who frequented local wine-shops (52-54). The present study was part of the team's efforts to gain an in-depth understanding of the intersections of violence and HIV risk for FSWs in Chennai.

For the study, trained field staff contacted key-informants and CPOLs from various cruising locations, such as cinema halls, bus-terminals, and hotels/lodges in Chennai during their regular, bi-weekly field-trips and informed them about the study and enlisted their support in recruiting participants. The main method of recruitment was through word of mouth referrals to other women in their social networks. When potential respondents were identified, they were provided contact information of the project staff who subsequently approached the FSWs for participation in the study. Data on ineligibility and refusal rates were not recorded.

The eligibility criteria included: (a) having been a female sex worker for at least one year; (b) being in an intimate relationship with a non-paying male sexual partner currently or in the past year; (c) experiencing at least one form of violence (verbal/physical/sexual) either from a client and/or an intimate partner in the past year; and (d) soliciting clients on streets and public venues, such as cinema halls, bus-terminals, railway stations, hotels/lodges and/or independently through brokers, through informal social networks and providing sexual services at a venue of the client's choice. The field staff determined eligibility in a conversational manner, and while all the required questions were asked of potential respondents, they did not follow any rigid sequence when questioning. The specific questions included: "How long have you been practising sex work?" "Where do you generally solicit clients?" "Do you have someone with whom you feel very close to at this point or have been in the past year, someone who you have sex with, but who does not pay you?" "Is the person male or female?" "In your relationship with this intimate partner, have you experienced any form of violence in the past year?" "Has any paying-client been abusive to you in the past year?" FSWs who did not report being in an intimate relationship in the past year, those who identified their intimate partners as female (however, there were none reported), and those who did

not report any experience of violence in the past year were ineligible for the study.

For the purposes of the study, 'male intimate partner' of FSWs was defined as: (a) husbands/spouses who cohabited with FSWs, or (b) cohabiting 'regular, non-paying male partner' whom women considered 'husbands' (possibly ex-client), or (c) non-cohabiting 'regular, non-paying male partner (possibly ex-client). Clients of FSWs in the study were defined as those 'paying-sexual partners' (one-time clients) with whom women did not have an ongoing relationship.

Measurement

The survey instrument was pilot-tested among 20 FSWs, revised, and subsequently finalized. Besides basic demographic information, the questionnaire included the following:

Experiences of violence from partners and clients: A modified version of the multi-country study protocol of the World Health Organization (55), developed for cross-cultural use, was used for measuring the respondents' experiences of violence. Experiences of verbal and physical violence by the current intimate partner and/or client were assessed in the 12 months before the interview. Verbal abuse was assessed with one item that examined yelling or shouting, and moderate physical violence included slapping/throwing, pushing/pulling, and hitting with fist while severe physical violence included kicking/dragging, trying to burn/strangle, threatening with a knife/gun/other weapons, and attacking with a knife/gun/other weapons. Additionally, the frequency of each of the acts of violence was also assessed. The Cronbach's alpha for the abuse items for this sample was 0.69 for IPV and 0.71 for violence from client.

Injury: Women were asked if they experienced sprains/bruises/cuts/scratches/aches/physical pain, injury/broken bones, had lost consciousness, or had to visit a doctor or a health centre because of violence from intimate partner or client.

Experiences of sexual coercion: Experiences of sexual coercion included verbal threats, physical force, and force to perform unwanted sexual acts.

Alcohol-use: Alcohol-use in the case of IPV was assessed with a set of four questions. Women were asked if they/their partners were under the influence of alcohol during the most recent episode of violence. They were also asked about the frequency of alcohol consumption by women/partners dur-

ing episodes of violence in the past year. Further, women were asked if they generally consumed alcohol before meeting a client/regular customer and if clients generally consumed alcohol before sex.

The protocol also included questions on the 'main reasons' that intimate partners and/or clients assaulted them for in the past year. The survey instrument was forward-translated into Tamil and back-translated into English.

Analysis of data

Given the goals of the study, analyses conducted were primarily descriptive and exploratory. Univariate descriptive analysis was performed to examine the distribution of all variables of interest. The Stata software (version 9.0) was used for quantitative analyses. Variables for experience of violence from client and IPV were coded as four-level categorical variable: 0=no violence, 1=verbal violence, 2=moderate physical violence, and 3=severe physical violence. Exploratory analyses, i.e. crude associations and chi-square analyses, were conducted to investigate the potential factors associated with experiencing sexual coercion from clients among the study FSWs.

Ethics

The study staff completed surveys after ascertaining eligibility and obtaining informed consent during March-July 2004. The protocols and procedures were approved by the institutional review boards of both Johns Hopkins University and YRG Centre for AIDS Research and Education (YRG CARE) in Chennai. In total, 100 sex workers were surveyed using the structured questionnaire.

RESULTS

Characteristics of street-based female sex workers in Chennai

The sociodemographic characteristics of street-based FSWs are summarized in Table 1. Their mean age was 32.3 years (SD 5.3), and most (81%) had received education up to either elementary or middle-school levels. For most (81%) respondents, intimate partners comprised husbands or regular non-paying sexual partners who cohabited with the women. Women had been in the sex-trade for, on average, six years (SD 3.6).

Triggers for violent episodes and experiences of various forms of violence and injury

Triggers for violence ranged from 'no particular reason' to 'not completing household chores to

Table 1. Sociodemographics of abused female sex workers (n=100) in Chennai, India

Demographics	IPV* (n=100)		Violence from client (n=76)	
	No.	%	No.	%
Age				
Average years (mean, SD)	32.3 (5.3)		31.8 (5.5)	
20-29	28	28	25	32.9
30-39	62	62	45	59.2
≥40	10	10	6	7.9
Education				
No schooling	19	19	15	19.7
Elementary schooling	49	49	41	54.0
Mid-level schooling	32	32	20	26.3
Marital status				
Unmarried and living alone	5	5	15	19.7
Currently married and living with spouse	76	76	56	73.4
Unmarried and living with intimate partner	5	5	5	6.6
Deserted	6	6	4	5.3
Widowed	8	8	8	10.5
Years working in sex-trade				
1-4	33	33	30	39.5
5-9	47	47	34	44.7
10-14	14	14	9	11.8
≥15	6	6	3	4.0

*All the female sex workers in the study experienced violence from their intimate partner; IPV=Intimate partner violence; SD=Standard deviation

satisfaction' (Table 2). The most common trigger reported by the respondents for both intimate and client-related violence was arguments over money. In the case of IPV, this was followed by refusal of women to have sexual relations (83%), partner's suspicion of being unfaithful (81%), and drunkenness of partner (81%). Initiating condom-use and drunkenness of women were important triggers for client-related violence (46% and 26% respectively).

Experience of violence from either client or intimate partner was a criterion for participation in the study. The results showed that, although 24% of the participants did not report any experience of violence from client, all the respondents experienced some form of IPV in the past year. While all the FSWs experienced some form of violence, significantly more numbers experienced 'severe IPV' (98%) compared to that of severe client-initiated violence (Table 2). Specifically, 62% reported that their intimate partners had tried to burn/strangle them in the past year, and none reported these experiences from clients. Further, significant proportions of the women experienced severe physical assaults from intimate partners 'many' times in the past year, including kicking/dragging (61.9%), attempt to burn/strangle (45.2%), threats with a

knife/gun/weapon (38.5%), and even being attacked with a knife/weapon (15.6%) (data not shown). On the other hand, the most common form of abuse from clients was verbal aggression (98.7%) in the past year (Table 2).

The study respondents suffered significant injuries because of IPV and relatively fewer consequences of violence from client. Sprains/bruises/cuts/scratches/aches/physical pain were the most commonly-reported form of injuries from both clients and intimate partners. However, while 81% of the women reported broken bones because of IPV, only two reported the same froms client-induced violence. Significantly, 38% reported having lost consciousness due to IPV while none reported the consequence as a result of client-induced violence. Seventy-nine percent of the respondents visited a doctor/sought help from a health clinic to address the injuries due to IPV compared to five women who did so due to client-induced violence.

Role of alcohol in FSWs' experiences of violence

The role of alcohol in women's intimate and work-life is shown in Table 3. Most (99%) respondents reported that their intimate partners had been under

Table 2. Type of violence and triggers for violence that FSWs experienced from their intimate partners and clients

Type of violence and triggers	IPV (n=100)		Violence from client (n=76)	
	No.	%	No.	%
Type of abuse				
Verbal aggression	99	99	75	98.7
Minor physical assault	100	100	31	40.8
Severe physical assault	98	98	25	32.9
Individual type of violence				
Yelled or shouted at	99	99	75	98.7
Slapped or had something thrown at them	98	98	14	18.4
Pushed, pulled, or held down	97	97	30	39.5
Hit with fist or something that could hurt them	92	92	4	5.3
Kicked or dragged	97	97	25	32.9
Tried to burn or strangle	62	62	0	0
Threatened with knife, gun, or other weapons	39	39	0	0
Attacked with knife, gun, or other weapons	32	32	0	0
Type of trigger*				
No particular reason	69	69	8	10.5
Husband or client was drunk	81	81	57	75.0
Initiated condom-use	10	10	44	57.9
Suspected of being unfaithful	81	81	49	64.5
Argument over money	100	100	75	98.7
Husband had work tensions	38	38		NA
Refused sexual relation	83	83		NA
Retorted back to husband/elders	77	77		NA
Disobeyed husband/elders	69	69		NA
Housework not completed to satisfaction	53	53		NA
Was drunk		NA	26	34.2

*Not all triggers were asked in regard to IPV and violence from client. NA in the table indicates that the particular trigger was not asked; FSWs=Female sex workers; IPV=Intimate partner violence

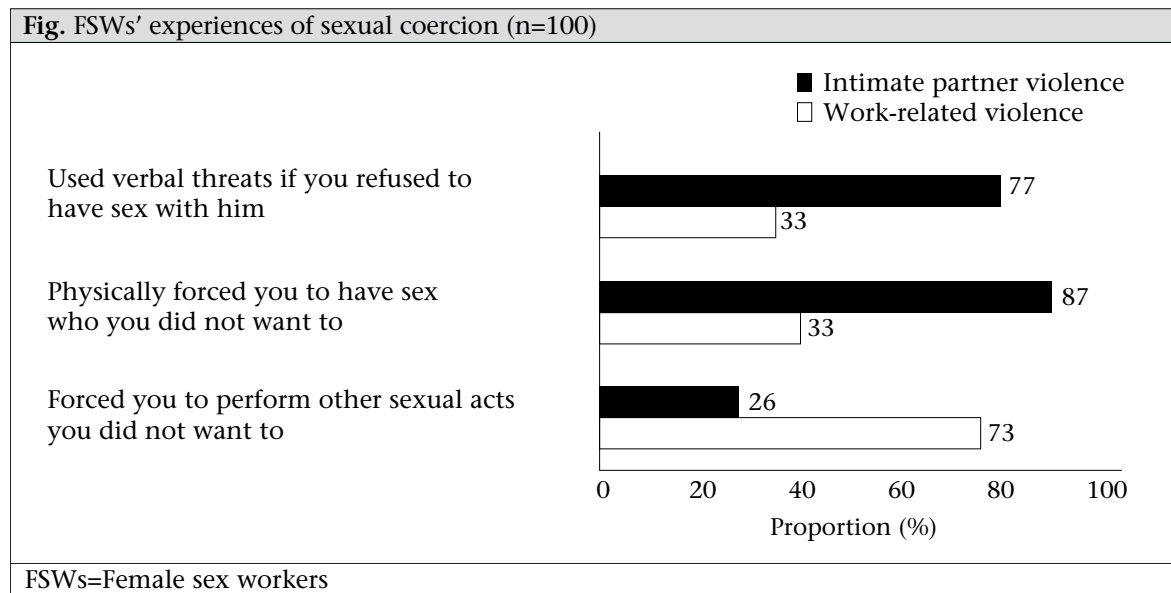
the influence of alcohol in the most recent episode of violence. Over one-third (39%) of the FSWs also reported consuming alcohol before meeting clients. Consumption of alcohol by the women was not statistically associated with their experiences of verbal/moderate physical IPV or severe IPV.

Experiences of sexual coercion

In the current sample of abused FSWs, one-third experienced verbal threats, 38% reported physical force from clients to have sex, and 73% reported being forced to perform unwanted sexual acts by clients (Fig.). Sex workers who were physically forced by clients to have sex were more likely to also report experiencing verbal/moderate physical violence from clients compared to those who were not forced to have sex ($\chi^2=5.40$, $p=0.02$). We further examined the potential demographic characteristics associated with sexual coercion from client (Table 4). The results showed that the age of women

and the number of years working in the sex-trade were significantly associated with experiencing sexual coercion from clients. Given the high correlation between the age of women and the number of years working in the sex-trade, these variables were not adjusted in a logistic regression model; instead, crude associations between the variables of interest were examined for exploratory purposes. The results of bivariate analysis showed that women who had been in the sex trade for 1-4 years had almost five times the odds of being sexually coerced by clients compared to FSWs who had been in the sex-trade for 10 or more years [crude odds ratio (OR): 4.8, 95% confidence interval (CI) 1.2-19.1]. Similarly, women who were aged 20-29 years had more than three times the odds of being sexually coerced by clients compared to FSWs who were aged 30 years or older (crude OR: 3.7, 95% CI 1.1-13.4).

The large majority of the study women reported that their intimate partners used verbal threats



if they refused sex (77%) and had physically forced to have sex (87%) (Fig.). A relatively-smaller proportion (26%) reported that their partners forced them to perform unwanted sexual acts. Further, 86% of the FSWs who were physically forced by their intimate partners to have sex also experienced severe physical IPV, although this relationship was not significant.

DISCUSSION

The present study captures the FSWs' differential experiences of abuse in intimate relationships versus violence that emanated from their work-sphere in a purposive convenience sample of abused street-based FSWs in Chennai, India. Experiences of violence from clients among the study women echoed the findings of earlier research on street-based sex workers in India and elsewhere in the world (24,25,29,30,32,33), highlighting the dangerous environments in which street-based FSWs operate. Women who were relatively inexperienced in the sex-trade had significantly higher odds of being forced to have sex and perform unwanted sexual acts by clients who exerted more power in the context of illegal sex work in India, as in earlier studies in Australia (56). These problems were exacerbated in the context of alcohol-use by clients, intimate partners, and sometimes women themselves. These findings resonate with those from earlier studies that have underscored substance-use as a means for FSWs to cope with the stressors of sex work (57).

One of the most disturbing findings of the present study was the pervasiveness of reports of severe IPV and injuries unlike previous studies which found that sex work helped women lead autonomous life, independent of abusive and unfaithful part-

ners (46). This finding echoes the previous findings of quantitative and qualitative research in India that found overwhelming reports of severe IPV (9,10,48). Interestingly, the present study also found that one of the important triggers for IPV among FSWs was the suspicion of infidelity on the part of women, a finding similar to that found in studies that examined triggers for spousal violence among married women (9,10,58). Further, reports

Table 3. Alcohol-use patterns of FSWs and intimate partners

Alcohol-use patterns	FSWs (n=100)
Under the influence of alcohol in the most recent episode of violence	
FSW	17
Intimate partner	99
Frequency of alcohol consumption in violent episodes in the past year (FSW)	
Often	3
Sometimes	8
Rarely/never	89
Frequency of alcohol consumption in violent episodes in the past year (partner)	
Often	92
Sometimes	6
Rarely/never	2
Consumption of alcohol by FSWs before meeting clients generally	
No	61
Yes	39

FSWs=Female sex workers

Table 4. Association of demographic factors, alcohol consumption, and sexual coercion from clients*

Demographics	Actual experience of sexual coercion				p value
	Yes (n=75)		No (n=25)		
	No.	%	No.	%	
Age (years)					
20-29	25	89.3	3	10.7	0.01
30-39	46	74.2	16	25.8	
≥40	4	40.0	6	60.0	
Education					
No schooling	15	79.0	4	21.0	0.36
Elementary schooling	39	79.6	10	20.4	
Mid-level schooling	21	65.6	11	34.4	
Marital status					
Unmarried and living alone	2	40.0	3	60.0	0.11
Currently married and living with spouse	59	77.6	17	22.4	
Unmarried and living with intimate partner	5	100.0	0	0	
Deserted	3	50.0	3	50.0	
Widowed	6	75.0	2	25.0	
Years working in the sex-trade					
1-4	29	87.9	4	12.1	0.03
5-9	34	72.3	13	27.7	
10-14	12	60.0	8	40.0	
≥15	2	33.3	4	66.7	
Alcohol					
FSWs consume alcohol before meeting clients					
Yes	28	71.8	11	28.2	0.64
No	47	77.0	14	23.0	
Frequency of alcohol consumption from clients					
Always/often	70	77.0	21	23.0	0.22
Sometimes/rarely	5	55.6	4	44.4	

*Sexual coercion was defined as FSW who had actual experiences of sexual coercion from client, not just verbal threats; FSW=Female sex worker

of sexual coercion and threats by intimate partners of FSWs were also similar to reports of population-based studies of married women in India (7) and earlier studies with FSWs in India (43). This finding is particularly significant given the established link between sexual coercion of Indian women by their husbands and vulnerability to HIV infection (7). The above findings are especially salient given earlier research evidence that FSWs in Chennai consider their relationship with long-term non-paying, regular partners identical to a matrimonial relationship, and most did not initiate condom-use with their intimate sexual partners (48). It is also possible that the FSWs in our study were unable or unwilling to transcend traditional, patriarchal community gender norms and role expectations in the context of intimate, particularly marital-like relationships with emotional ties with intimate partners as in earlier research among Indonesian sex workers (45), unlike their relationships with

paying-clients where they were sometimes able to assert themselves (48).

Limitations

While this study provides an overview of the abusive experiences of street-based FSWs in India, some limitations of this study need mention. First, the convenience sample of abused FSWs in this study may not be representative of the larger heterogeneous sex worker community in Chennai or elsewhere in India. In addition, the small sample size and selection in this study limited the use of advanced statistical analyses and providing prevalence estimates; these results would need to be replicated in larger cross-sectional and in longitudinal studies. Finally, the findings of the present study have limited generalizability to those FSWs who have experienced violence. Despite these limitations, the study provides important insights into the lives of abused street-based sex workers and highlights their vulnerabilities resulting from

violence and experiences of sexual coercion in the contexts of both work and intimate relationships in India.

Conclusions

In conclusion, it appears that, for abused FSWs, the risk of HIV infection emanates from both their intimate partners and clients. Given the vulnerability of FSWs to violence from client due to condom initiation, it would be important to examine the efficacy of programmes that emphasize condom-promotion efforts initiated by sex workers themselves. Future prevention interventions with the female sex worker community may also need to include specific programmes with male clients. There is an urgent need to recognize that FSWs often must negotiate multiple roles and identities in the contexts of intimate relationships and the challenges that arise in their efforts to stay safe. It is also vital to examine how FSWs cope with their emotional needs and challenges to sexual health in long-term intimate relationships (56).

Understanding the relationship among sex workers' experiences of violence, alcohol-use (of partners and by women themselves), and HIV risk behaviours is critical for the development of appropriate prevention strategies and policies. Specifically, it would be important to examine if violence itself may be a pathway to sex work and HIV risk behaviours for sex workers in India. Studies in the future would need to not only explore direct and indirect health risks of sex workers stemming from direct exchanges with customers but also move to addressing the same with regular/consistent clients and intimate partners (47,49,56,59). Future research also needs to ensure that female sex workers are included in studies that focus on establishing the prevalence of IPV in the general population and also in interventions that target partner violence along with other women, in addition to programmes that aim at preventing client-initiated violence specific to sex workers. It is imperative that researchers, practitioners, and policy-makers adopt a participatory, holistic approach within the larger context of a human rights-based framework while planning interventions and policies for FSWs (60,61). Finally, future interventions and policies would need to adopt a multi-pronged approach that addresses structural, contextual, and individual factors that extend beyond the narrow HIV-prevention models keeping overall well-being of sex workers in mind.

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REFERENCES

1. Ellsberg MC. Violence against women: a global public health crisis. *Scand J Public Health* 2006;34:1-4.
2. Tjaden P, Thoennes N. Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the national violence against women survey. *Violence Against Women* 2000;6:142-61.
3. World Health Organization. WHO multi-country study on women's health and domestic violence against women: initial results on prevalence, health outcomes, and women's responses (summary report). Geneva: World Health Organization, 2005. 38 p.
4. Bhatti RS. Socio-cultural dynamics of wife battering. *In: Sood S, editor. Violence against women. Jaipur: Arihant, 1990:45-56.*
5. Ahmed-Ghosh H. Chattels of society: domestic violence in India. *Violence Against Women* 2004;10:94-118.
6. Kapur R, Cossman B. Subversive sites: feminist engagements with law in India. New Delhi: Sage, 1996. 352 p.
7. Silverman JG, Decker MR, Saggurti N, Balaiah D, Raj A. Intimate partner violence and HIV infection among married Indian women. *JAMA* 2008;300:703-10.
8. Dave A, Solanki G. Special cell for women and children: a research study on domestic violence. *In: Domestic violence in India 2: a summary report of four records studies. Washington, DC: International Center for Research on Women, 2000:25-33.*
9. Panchanadeswaran S, Koverola C. The voices of battered women in India. *Violence Against Women* 2005;11:736-58.
10. Rao S, Indhu S, Chopra A, Nagamani SN, Padaki R. Domestic violence: a study of organizational data. *In: Domestic violence in India 2: a summary report of four records studies. Washington, DC: International Center for Research on Women, 2000:15-24.*
11. Rao V. Wife-beating in rural South India: a qualitative and econometric analysis. *Soc Sci Med* 1997; 44:1169-80.

12. Ackerson LK, Kawachi I, Barbeau EM, Subramanian SV. Effects of individual and proximate educational context on intimate partner violence: a population-based study of women in India. *Am J Public Health* 2008;98:507-14.
13. Gerstein L. In India, poverty and lack of education are associated with men's physical and sexual abuse of their wives. *Int Family Plann Perspect* 2000;26:44-5.
14. Verma RK, Collumbien M. Wife beating and the link with poor sexual health and risk behavior among men in urban slums in India. *J Compar Fam Stud* 2003;34:61-74.
15. Martin SL, Moracco KE, Garro J, Tsui AO, Kupper LL, Chase JL *et al.* Domestic violence across generations: findings from northern India. *Int J Epidemiol* 2002;31:560-72.
16. Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002;359:1331-6.
17. Heise LL, Raikes A, Watts CH, Zwi AB. Violence against women: a neglected public health issue in less developed countries. *Soc Sci Med* 1994;39:1165-79.
18. Plichta SB, Falik M. Prevalence of violence and its implications for women's health. *Womens Health Issues* 2001;11:244-58.
19. Maman S, Mbwapo JK, Hogan NM, Kilonzo GP, Campbell JC, Weiss E *et al.* HIV-positive women report more lifetime partner violence: findings from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *Am J Public Health* 2002;92:1331-7.
20. McDonnell KA, Gielen AC, O'Campo P. Does HIV status make a difference in the experience of lifetime abuse? Descriptions of lifetime abuse and its context among low-income urban women. *J Urban Health* 2003;80:494-509.
21. Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntyre JA, Harlow SD. Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *Lancet* 2004;363:1415-21.
22. El-Bassel N, Witte SS. Designing effective HIV prevention strategies for female street sex workers. *AIDS Patient Care STDS* 1998;12:599-603.
23. Wingood GM, DiClemente RJ. The effects of an abusive primary partner on the condom use and sexual negotiation practices of African-American women. *Am J Public Health* 1997;87:1016-8.
24. Elmore-Meegan M, Conroy RM, Agala CB. Sex workers in Kenya, numbers of clients and associated risks: an exploratory survey. *Reprod Health Matters* 2004;12:50-7.
25. Farley M, Baral I, Kiremire M, Sezgin U. Prostitution in five countries: violence and post-traumatic stress disorder. *Feminism Psychol* 1998;8:405-26.
26. Izugbara CO. "Ashawo suppose shine her eyes": female sex workers and sex work risks in Nigeria. *Health Risk Soc* 2005;7:141-59.
27. Miller J. Violence and coercion in Sri Lanka's commercial sex industry: intersections of gender, sexuality, culture, and the law. *Violence Against Women* 2002;8:1044-73.
28. Nishigaya K. Female garment factory workers in Cambodia: migration, sex work and HIV/AIDS. *Women Health* 2002;35:27-42.
29. Rushing R, Watts C, Rushing S. Living the reality of forced sex work: perspectives from young migrant women sex workers in northern Vietnam. *J Midwifery Womens Health* 2005;50:e41-4.
30. Wechsberg WM, Luseno WK, Lam WK. Violence against substance-abusing South African sex workers: intersection with culture and HIV risk. *AIDS Care* 2005;17(Suppl 1): S55-64.
31. Wojcicki JM, Malala J. Condom use, power and HIV/AIDS risk: sex-workers bargain for survival in Hillbrow/Joubert Park/Berea, Johannesburg. *Soc Sci Med* 2001;53:99-121.
32. Wong WC, Yilin W. A qualitative study on HIV risk behaviors and medical needs of sex workers in a China/Myanmar border town. *AIDS Patient Care STDS* 2003;17:417-22.
33. Asthana S, Oostvogels R. Community participation in HIV prevention: problems and prospects for community-based strategies among female sex workers in Madras. *Soc Sci Med* 1996;43:133-48.
34. Jayasree AK. Searching for justice for body and self in a coercive environment: sex work in Kerala, India. *Reprod Health Matters* 2004;12:58-67.
35. Bhawe G, Lindan CP, Hudes ES, Desai S, Wagle U, Tripathi SP *et al.* Impact of an intervention on HIV, sexually transmitted diseases, and condom use among sex workers in Bombay, India. *AIDS* 1995;9(Suppl 1):S21-30.
36. Chattopadhyay A, McKaig RG. Social development of commercial sex workers in India: an essential step in HIV/AIDS prevention. *AIDS Patient Care STDS* 2004;18:159-68.
37. Dandona R, Dandona L, Gutierrez JP, Kumar AG, McPherson S, Samuels F *et al.* High risk of HIV in non-brothel based female sex workers in India. *BMC Public Health* 2005;5:87.
38. Panchanadeswaran S, Johnson SC, Go VF, Srikrishnan AK, Sivaram S, Solomon S *et al.* Using the theory of gender and power to examine experiences of partner violence, sexual negotiation, and risk of HIV/AIDS among economically disadvantaged women in southern India. *J Aggress Maltreat Trauma* 2007;15:155-78.
39. Madhivanan P, Hernandez A, Gogate A, Stein E, Gregorich S, Setia M *et al.* Alcohol use by men is a risk factor for the acquisition of sexually transmitted infections and human immunodeficiency virus from

- female sex workers in Mumbai, India. *Sex Transm Dis* 2005;32:685-90.
40. Manjunath JV, Thappa DM, Jaisankar, TJ. Sexually transmitted diseases and sexual lifestyles of long-distance truck drivers: a clinico-epidemiologic study in South India *Int J STD AIDS* 2002;13:612-7.
 41. Chandra PS, Carey MP, Carey KB, Prasada Rao PS, Jairam KR, Thomas T. HIV risk behaviour among psychiatric inpatients: results from a hospital-wide screening study in southern India. *Int J STD AIDS* 2003;14:532-8.
 42. Orchard T. In this life: the impact of gender and tradition on sexuality and relationships for Devadasi sex workers in rural India. *Sex Cult* 2007;11:3-27.
 43. Karandikar S, Próspero M. From client to pimp: male violence against female sex workers. *J Interpers Violence* 2010;25:257-73.
 44. Jana S, Basu I, Rotheram-Borus MJ, Newman PA. The Sonagachi Project: a sustainable community intervention program. *AIDS Educ Prev* 2004;16:405-14.
 45. Wolffers I, Triyoga RS, Basuki E, Yudhi D, Deville W, Hargano R. Pacar and Tamu: Indonesian women sex workers' relationships with men. *Cult Health Sex* 1999;1:39-53.
 46. Castillo DA, Gomez MGR, Delgado B. Border lives: prostitute women in Tijuana. *Signs* 1999;24:387-422.
 47. El-Bassel N, Witte SS, Wada T, Gilbert L, Wallace J. Correlates of partner violence among female street-based sex workers: substance abuse, history of childhood abuse, and HIV risks. *AIDS Patient Care STDS* 2001;15:41-51.
 48. Panchanadeswaran S, Johnson SC, Sivaram S, Srikrishnan AK, Latkin C, Bentley ME et al. Intimate partner violence is as important as client violence in increasing street-based female sex workers' vulnerability to HIV in India. *Int J Drug Policy* 2008;19:106-12.
 49. Ward H, Day S, Weber H. Risky business: health and safety in sex industry over a 9 year period. *Sex Transm Infect* 1999;75:340-3.
 50. Wechsberg WM, Luseno WK, Lam WK, Parry CD, Morojele NK. Substance use, sexual risk, and violence: HIV prevention intervention with sex workers in Pretoria. *AIDS Behav* 2006;10:131-7.
 51. Kelly JA. Popular opinion leaders and HIV prevention peer education: resolving discrepant findings, and implications for the development of effective community programmes. *AIDS Care* 2004;16:139-50.
 52. Sivaram S, Johnson S, Bentley ME, Srikrishnan AK, Latkin CA, Go VF et al. Exploring "wine shops" as a venue for HIV prevention interventions in urban India. *J Urban Health* 2007;84:563-76.
 53. Sivaram S, Johnson S, Bentley ME, Go VF, Latkin C, Srikrishnan AK et al. Sexual health promotion in Chennai, India: key role of communication among social networks. *Health Promot Int* 2005;20:327-33.
 54. Sivaram S, Srikrishnan AK, Latkin CA, Johnson SC, Go VF, Bentley ME et al. Development of an opinion leader-led HIV prevention intervention among alcohol users in Chennai, India. *AIDS Educ Prev* 2004;16:137-49.
 55. World Health Organization. WHO multi-country study on women's health and life experiences. Questionnaire (version 9). Geneva: World Health Organization, 2000.
 56. Pyett PM, Warr DJ. Vulnerability on the streets: female sex workers and HIV risk. *AIDS Care* 1997;9:539-47.
 57. Gossop M, Powis B, Griffiths P, Strang J. Female prostitutes in south London: use of heroin, cocaine and alcohol, and their relationship to health risk behaviours. *AIDS CARE* 1995;7:253-60.
 58. Peedicayil A, Sadowski LS, Jeyaseelan L, Shankar V, Jain D, Suresh S et al. Spousal physical violence against women during pregnancy. *BJOG* 2004;111:682-7.
 59. Cohan D, Lutnick A, Davidson P, Cloniger C, Herlyn A, Breyer J et al. Sex worker health: San Francisco style. *Sex Transm Infect* 2006;82:418-22.
 60. Center for Advocacy on Stigma and Marginalization. Rights-based sex worker empowerment guidelines: an alternative HIV/AIDS intervention approach to the 100% condom use program. Maharashtra: Sampada Gramin Mahila Sanstha, 2008. 23 p.
 61. Wolffers I, van Beelen N. Public health and the human rights of sex workers. *Lancet* 2003;361:1981.