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Condom negotiation and use among female sex workers in Phnom Penh, Cambodia

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Introduction

HIV was first identified in Cambodia in 1991. Since then, HIV has spread rapidly, reaching a peak prevalence of 2.0% in 1998 (1, 2). Although HIV prevalence estimates in the general population declined to 0.7–0.8% in 2010, high rates of HIV infection among specific risk groups remain a major concern. The primary mode of transmission for HIV is heterosexual intercourse, particularly via female sex workers (FSWs) and their clients (3, 4). In 2008, the estimated number of FSWs in Cambodia was around 20,000, of whom about 10% resided in Phnom Penh (5). Reported estimates of HIV prevalence among Cambodian FSWs in 2003–2010 ranged from 14.0 – 30.6% (3, 6–8); in Phnom Penh, the estimate was about 18.5%.

Consistent condom use is critical to reduce HIV transmission (9). Thus, understanding factors that influence consistent condom use among FSWs is key for developing effective prevention efforts. Previous studies indicate that condom use among Cambodian FSWs and paid clients increased from 30% in 1998 to over 80% in 2004 (10, 11) and remained stable through 2010 (7, 12). However, these studies did not differentiate between native versus foreign clients, who may not speak the same language as the FSW and may have different beliefs about condom use; hence, it becomes more challenging for condom communication, negotiation and use. Also, FSWs may use condoms less consistently with non-paying partners, increasing the likelihood of HIV transmission to low risk populations (11, 12). Previous studies among FSWs in Cambodia and neighboring countries have reported additional factors influencing consistent condom use. Condom use may be lower among FSWs who are new to the trade (6). Due to economic pressures FSWs may charge higher fees for unprotected sex (10, 13, 14). Street-based FSWs report significantly lower rates of consistent condom use than FSWs working in hair/beauty salons, massage parlors, karaoke bars and saunas (13), suggesting that point of contact is influential. Additional barriers include clients' pressure or threats of violence (more so for street-based FSWs) (13–15), and clients' drunkenness (13).

Condom-use negotiation skills and strategies are important for consistent condom use (16, 17). Although studies on condom negotiation have been conducted in other countries (13,

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15, 18–21) and in different populations, such as undergraduates or adult heterosexual women, (17, 22–25), little is known about effective condom negotiation strategies among FSWs in Cambodia. Furthermore, previous studies emphasized the importance of examining perceived effectiveness of, willingness to use and potential consequences of negotiation strategies, particularly with different partner types (17, 23, 26). Yet, to our knowledge, there is no information about this in the Cambodian FSW population.

In 2008, passage of the Law on the Suppression of Human Trafficking and Sexual Exploitation forced the closure of brothels in Cambodia, sending commercial sex underground (3, 27). Most FSWs are now non-brothel based. Many contact and serve clients through their workplaces, including massage parlors, coffee shops, karaoke parlors, nightclub/bars, barbershops, and beer gardens. Given the current underground status of the sex trade in Cambodia condom use among FSWs has become difficult to document and to promote (3, 8). Knowledge of current condom use practices and associated factors is needed to develop effective interventions. This exploratory study used a convenience sample of FSWs in Phnom Penh, Cambodia, taken into custody for trading sex, to examine: (1) characteristics of sex work which may influence condom use, (2) actual condom negotiation and use differentiated by partner type, and (3) perceived effectiveness of and willingness to use different condom negotiation strategies.

Methods

Study design, population, and recruitment

We conducted a cross-sectional survey with all FSWs who were taken into custody due to engagement in commercial sex and who were then transferred to the Activities Social Welfare Office (ASWO) in Phnom Penh from March to June, 2011. The ASWO, a governmental office under the Department of Social Affairs, Veteran & Youth Rehabilitation, helps vulnerable individuals such as street people and FSWs to connect with other local or international nongovernmental organizations (NGOs). The ASWO provides overnight or short-term lodging for FSWs while seeking an appropriate social center or NGO to which to refer them for further support. The ASWO informed the researchers when a new FSW cohort was transferred to their office. Eligible FSWs were invited to participate during their stay at ASWO. Inclusion criteria were: female, at least 18 years old, and able to communicate in Khmer, Vietnamese, or English. During the study, 93 FSWs were transferred to the ASWO and 81 were eligible (all ineligible were underage); all 81 agreed to participate in the study.

Procedure

All participants participated in a face-to-face interview about their sex work, condom practices, condom negotiation strategies, and perceived effectiveness of, willingness to use, and perceived consequences of these strategies. Most interviews were conducted in an empty room at the ASWO; some were performed at the NGOs to which FSWs were referred. Interviewers comprised four social workers whose native language was Khmer and who were employees of the Psycho-social Service Association, a NGO that works independently with the ASWO. These social workers had experience conducting interviews; they received additional training for this study and on ethical issues including confidentiality. The interview, which employed a structured questionnaire with some open-ended questions, was conducted in the preferred language of the FSWs. No information that could potentially identify participants was collected. Only research staff were present during the interview; no one else, including the ASWO's or other NGOs' staff, stayed in the room or knew the interview's content. Prior to interviewing, participants were fully informed regarding the purpose of the interview, the study's rationale, and the benefits/risks of

participation. Participation was completely voluntary. Each participant received $7 US dollars in compensation. The study was approved by the Phnom Penh Department of Social Affairs, Veteran & Youth Rehabilitation and by the University of Texas Health Science Center's Institutional Review Board. As recommended by the Institutional Review Board, FSWs indicated agreement to participate by giving oral consent, so that confidentiality was better ensured. No participant refused to participate or to complete the interview. Interviews lasted about one hour.

Measures

Socio-demographic variables—Socio-demographic variables included age, religious beliefs, ethnicity, language(s) spoken, educational level, main job prior to sex work, and marital status.

Characteristics of sex work—Characteristics of sex work included age at first traded sex, condom use at first traded sex, who requested condom use at first traded sex, duration in sex work, primary locations for approaching clients, primary locations for traded sex, average number of clients per week, charges for penetrative sex (defined as both vaginal and anal sex, unless specified), average times of drinking when having traded sex, and average times of having drunk clients.

History of HIV/STIs—History of HIV/STIs included self-report of lifetime with HIV and other STIs.

Condom use negotiation strategies—Measures of condom use negotiation strategies were adapted from the 9 influence strategies developed and validated by Noar et al. (2002) (17). These strategies included reward, emotional coercion, risk (HIV/STIs) information, seduction, deception, withholding sex, relationship conceptualizing, autocracy, and direct request (Table I). Participants were asked an open-ended question, "How do you persuade or make your native paying clients use a condom?" The same question was asked for foreign paying clients and non-paying regular partner(s). Native clients were defined as those who spoke the same language as the participant regardless of country of origin; foreign clients were those who did not speak the same language. Non-paying regular partners included those with whom participants had sex but not in exchange for money, drugs, or other in-kind arrangements (e.g. spouse or live-in sexual partner). Participants were asked the average number of times partners' refused during their first 10 condom-request attempts, and what they did when the first negotiation strategy failed. If participants continued to negotiate, we asked the same open-ended question to see if they reported another negotiation strategy. We documented up to three negotiation strategies. Participants were asked from whom they learned these negotiation strategies.

Condom use—Consistent condom use was assessed via multiple measures: (1) an overall self-rating of condom use consistency, "How often do you use a condom?' measured using a 5-point Likert scale (ranging from *1 = none* to *5 =always*); (2) whether the participant used a condom during the last sex, and (3) the frequency of condom non-use during the last week before being taken into custody. Each of these items was asked separately for condom use with native versus foreign paying clients and non-paying regular partners.

Perceived effectiveness of and willingness to use condom negotiation strategies—After asking participants about their actual condom negotiation and condom use in the past, interviewers presented participants with a list of nine condom negotiation strategies adapted from Noar et al. (2002) (17) and explained them using definitions and examples (Table I) in order to assess perceived effectiveness of, willingness to use, and

perceived consequences of these strategies. To our knowledge, no previous studies had validated these nine condom negotiation strategies for Khmer or Vietnamese cultures, so we examined content validity. Two Vietnamese and three Khmer researchers, for whom English was a second language, collaborated to select items which were familiar or comprehensible in Khmer and Vietnamese to serve as examples (i.e. performance possibilities in Table I) of each negotiation strategy domain. The whole questionnaire, including Table I, was translated and back translated between English and Khmer, and between English and Vietnamese, to ensure accuracy. Participants were given a few minutes to review these strategies and to ask questions, if necessary. Then, participants were asked which strategies they knew or had heard of, which ones would be effective to use with each type of client/partner (selecting all that applied), and which ones they would be willing to use with clients versus non-paying partners. Participants were asked to select up to three strategies which they thought would incur negative consequence(s), and what the consequence(s) might be.

Analysis

Participants' qualitative responses to open-ended questions about condom negotiation strategies were translated verbatim into English. Two investigators independently assigned the responses into one of the nine strategies listed in Table I, or into "unclear" or "other." Assigned numeric codes were compared to assess inter-rater reliability. About 8% of the codes varied; these discrepancies were resolved after inter-rater discussion. These variables were then treated as nominal variables in descriptive statistics. Wilcoxon matched-pair signed-rank tests were employed to compare condom negotiation and condom use with native paying clients versus foreign paying clients, and with non-paying regular partners. Chi-square tests and odds ratios were estimated to examine associations between some socio-demographic and work characteristics, reporting a condom negotiation strategy, and overall consistent condom use. For these analyses, consistent condom use was dichotomized as "always" versus all other responses for native and foreign clients, and as "quite often" + "always" versus all other responses for regular partners. Non-nominal variables related to sex-work characteristics (e.g. average times drinking alcohol before or during sex) were dichotomized using the variables' mean values as a cut-off point. Percentages were calculated to assess perceived effectiveness of, willingness to use, and perceived consequences of each strategy by partner type.

Results

The mean age of participants was 25 years (S.D.= 5.5). Most participants were Buddhist and Khmer. Except for one Vietnamese FSW, all participants could speak Khmer for daily communication, 17.3% spoke an additional language and 6.2% spoke three or more languages. All participants but one Vietnamese chose to conduct the interview in Khmer. Forty percent had not attended elementary school and about half were unemployed or unskilled labor before entering sex work (Table II).

The mean age of first traded sex was around 21 years (SD=4.92). About half did not use a condom at first traded sex; for those who did, one-third reported that condom use was initiated by the client. Most participants appeared to be direct sex workers, contacting clients on the street. These FSWs averaged eight clients per week. Eighteen percent reported charging higher charges for unprotected penetrative sex. About half the time, participants had drunk clients. Among participants, 13.6% reported being HIV-positive; 21% had never had an HIV test. The most common reported STI was Trichomoniasis (Table III).

Fifteen percent of participants did not negotiate or could not describe a condom negotiation strategy for native clients. Comparatively, this percentage rose to 29.0% ($p < .01$) for sex with foreign clients and 67.6% ($p < .01$) for sex with non-paying regular partners. The most

common type of negotiation strategy used with native clients and non-paying regular partners was “provision of risk information” (43.8% and 26.5% respectively); for foreign clients, it was “direct request” (39.5%). Among those who described a condom negotiation strategy with foreign clients, two-thirds could speak Khmer only. When condom use was first requested, about 20% of the time the request was rejected by native and foreign clients and 70% of the time by non-paying regular partners. When the first negotiation strategy was rejected by native or foreign clients, most participants reported trying another negotiation strategy, e.g., withholding penetrative sex and/or offering non-penetrative sex (i.e., hand job or oral sex) or charging more for unprotected sex. Conversely, with non-paying regular partners, most participants (63.6%) acquiesced to unprotected sex. About half of participants could not describe a second condom use negotiation strategy if their first strategy failed. None could describe a third negotiation strategy. The most common sources from which FSWs learned effective condom negotiation strategies were themselves (66.7%), a peer-educator (57.7%), or another sex worker (57.7%) (Table IV).

Overall, consistent condom use (“quite often” + “always”) was high for sex with native clients (98.8%), yet comparatively lower with foreign clients (86.9%, $p < .05$) and non-paying regular partners (26.5%, $p < .01$). Condom use at last sex mirrored this pattern. Participants who did not negotiate or did not know how to negotiate condom use were less likely to report condom use (“quite often” + “always”) with non-paying regular partners (OR=4.60, 95%CI=1.11–19.14, p=.03). This association between condom negotiation and condom use was not found with foreign clients (OR=1.40, 95%CI=.36–5.41, p=.23) and could not be examined for native clients due to very small cell counts for condom non-use. All examined socio-demographic and sex work characteristics (including ethnicity, not attending elementary school, speaking two or more languages, being in sex work for one year or more, being a street-based FSW, trading sex at an unfamiliar location designated by clients, having 8+ clients per week, average number of times drinking alcohol before or during sex, average number of times having a drunk client, ever diagnosed with a STD, and being HIV-positive) were unassociated with not negotiating or not knowing how to negotiate condom use with all three types of partners (all p-values >.17, data not shown). Similarly, these socio-demographic and sex work characteristics were unassociated with reported overall condom use with all three types of partners (all p-values >.06, data not shown). Only those who reported drinking alcohol before or during sex an average of 3–10 times for every 10 traded sex episodes, compared to those who reported an average of 0–2 times, were significantly less likely to report always using a condom with native clients (OR=.11, 95%CI= .03–.45, p=.001). Limited sample sizes for sub-groups (i.e. participants who had a foreign client or a regular partner) and missing data for some variables restricted the examination of several associations, and generated wide confidence intervals.

Less than 40% of participants had heard of each negotiation strategy. The most familiar strategies were withholding sex and seduction; the least familiar were reward and autocracy. Overall, strategies were perceived to be more effective with native clients than with foreign clients and non-paying partners. Seduction, withholding sex, and direct request were commonly considered effective with native and foreign clients. Seduction, risk information and direct request were commonly considered effective with non-paying partners. A greater percentage of participants were willing to use strategies with paying clients than with non-paying partners. Few participants considered emotional coercion and relationship conceptualization to be effective; few were willing to use them even with non-paying partners (Table V). Four strategies which were perceived most likely to cause negative consequences with paying (selected by >35% participants) and non-paying partners (>16%) included emotional coercion, seduction, withholding sex, and direct request. Seduction was considered too time consuming. Losing the client/partner and inciting violence were cited as potential consequences for the other three strategies.

Discussion

In our sample, 15.0% of FSWs reported not negotiating condom use or could not describe a specific condom negotiation strategy with native clients; this percentage increased to 29.0% with foreign clients. For those who reported negotiating condom use, the most commonly used first-round strategies were risk information with native clients and direct request with foreign clients. This may have been because direct request does not require a lot of communication with foreign clients with whom language skills may be a barrier. Only half of participants could describe an additional negotiation strategy to use as a back-up or sequentially if their first strategy failed. With non-paying regular partners, two thirds of participants did not negotiate or know how to negotiate condom use. This may be because they did not want to negotiate or because they did not know appropriate strategies to use with non-paying partners versus commercial clients. Even when participants did negotiate condom use with a non-paying partner, the median number of times being rejected was seven out of 10; over 60% reported accepting the rejection or not trying other strategies to initiate condom use. This suggests that even when FSWs wanted to use condoms with regular partners, they did not have sufficient skills to deal with rejection or to pursue their demands. Additionally, unsuccessful communication or negotiation may be due to women's perceived lack of gender-based power, which has been found in many countries (28–30), and which has also been suggested in previous Cambodian studies (31, 32). These data suggest that there is a substantial gap in condom negotiation in this population.

Although self-reported consistent condom-use rates with native clients were comparable to those in national surveys (7, 12), the rates of condom use with foreign clients and with non-paying regular partners were considerably lower, both overall and at last sex. Additionally, despite high reported rates of condom use with clients, 18.5% of FSWs reported charging higher rates for unprotected sex. This implies their potential willingness to substitute condom use for more money, as reported in studies among FSWs in other countries (13, 18). Three fourths of participants did not often use a condom with their regular partners. Studies worldwide indicate that "regular partners", although not paying directly for sex, may include men with whom the FSWs were familiar after several episodes of sex or with whom they have a longstanding and possibly concurrent relationship (14). An example of this may be the emerging phenomenon of "sweethearts" in Cambodia, in which the FSWs avoid being labeled as "sex workers" by providing sexual and domestic services in exchange for long-term or periodical material support from one or more men. In the 2010 Cambodian Behavioral Sentinel Surveillance, 48.3% female entertainment workers had a sweetheart in the past year (12). In summary, inconsistent condom use with all sexual partners remains a concern for HIV/STIs prevention in this population.

By recruiting participants taken into custody through the ASWO, we may have identified FSWs at the lower stratum of commercial sex. Three-fourths of participants were soliciting clients on the street. Street-based FSWs are generally considered the highest-risk group and lack some of the environmental or structural supports for condom negotiation and use (e.g. manager's support/pressure, consistent condom supply) (9, 14, 15). However, since passage of the Suppression Law, it is possible that these participants represent a growing segment of FSWs in Phnom Penh. Although 13.6% of participants reported being HIV-positive, this is most likely an underestimate given the 21.0% who had not been tested and uncertainty regarding when those who reported being HIV-negative were last tested. This speaks to the need for enhanced outreach and testing efforts in this population, and systems to ensure effective linkage to care for those who test positive.

Although two-thirds of participants had traded sex for over a year, less than half were familiar with the individual condom negotiation strategies described. Most strategies were

perceived to be more effective with native than with foreign paying clients. Although this may be due to inexperience serving foreign clients, it may also suggest lack of skills to utilize these strategies with foreign clients. Although some strategies (e.g. risk information) require foreign language proficiency, others (e.g. seduction and direct request) can be implemented non-verbally or with minimum foreign language literacy. Low perceived effectiveness of and lack of willingness to use strategies with non-paying partners is a worrying finding and should be addressed in interventions. Risk information may be a promising strategy to promote with native clients given its perceived effectiveness, low perceived likelihood of negative consequences, and moderate ratings of willingness-to-use. Three strategies most frequently considered effective with native and foreign clients (seduction, withholding sex, and direct request) were also those most likely reported to result in condom use by Noar et al.(2002). The strategies can be combined to maximize effectiveness. For example, some FSWs reported combining risk information and relationship conceptualizing or emotional coercion by contextualizing risk information, e.g., “You [client] have children and a wife, you should think of them, you should not get HIV” (Bui, unpublished data).

Given the impact of globalization and tourism, an increasing proportion of both FSWs and clients in Cambodia come from different countries (33); in this study, about half of the FSWs reported serving foreign clients. Thus, effective condom negotiation with a foreign-language speaker is becoming more critical. Future studies should further examine determinants of condom negotiation and actual condom practices of FSWs with foreign clients. Additional qualitative studies are needed to understand how condom use is communicated and negotiated. In general, future interventions to enhance condom communication and negotiation with all types of clients and sexual partners are necessary. Future interventions may also need to target other determinants of condom-use negotiation, such as ways to deal with consequent threats of violence, in order to improve condom negotiation. FSWs’ self-efficacy to negotiate condom use in different challenging circumstances such as having drunken clients also needs attention. Interventions should provide FSWs with alternative negotiation strategies in case their initial or preferred strategy fails, and strategies to deal with possible consequences. Interventions are also needed for specific FSW groups, e.g., novices (6), street-based (13), or immigrating FSWs (14) who may be less likely to negotiate and use condoms during traded sex.

Condom non-negotiation was significantly associated with inconsistent condom use for sex with regular partners. Although this suggests the role of condom negotiation in consistent condom use, the cross-sectional study design limits conclusions about causality. The moderate sizes of the sample or sub-groups also afforded limited power to detect statistically significant associations and restricted multivariate analyses. Thus, possible confounding factors could not be controlled for and the possible complexity of associations or interactions among variables could not be investigated. Binary non-associations between several socio-demographic and sex work characteristics with condom negotiation and condom use may be valid and hence may suggest that these factors were not either risk factors or potential confounders for the relationship between condom negotiation and condom use. Nevertheless, these non-associations, as well as the non-association between condom negotiation and condom use with foreign clients, may also be due to reduced power. Despite these binary non-associations, the prevalence of selected risk factors in the descriptive statistics, which were also reported in the literature as risk factors, such as being street-based FSWs (13–15) or having drunk clients (13), suggests that this group of FSWs may be more disadvantaged in condom negotiation and use. Thus, this study contributes descriptive evidence to the lack of condom negotiation and consistent condom use in this vulnerable group of FSWs; but it implies neither generalizable directional relationships

among variables, nor generalizable descriptive statistics for other groups of FSWs such as female entertainment workers.

Other limitations should be considered when interpreting study findings. The recruitment method limits the representativeness and generalizability of study results. Unfortunately, specific details regarding the context for arrest were not available; thus, FSWs in more private or guarded settings like massage parlors may have been less likely to be arrested. Although the interviews were conducted by empathetic social workers at a social service office, the fact that these FSWs had recently been taken into custody by police might have biased self-reports of sex work and sexual behaviors. Due to social desirability, these FSWs might have been trying to conform to expected behaviors and hence, for example, might have over-reported condom use frequencies. However, this methodology appears to have recruited a highly vulnerable subgroup of FSWs. In addition, participants had relatively little time to review all negotiation strategies; thus, an incomplete understanding of the strategies may have biased perceived effectiveness of and willingness to use strategies. Despite these limitations, these findings contribute significantly to knowledge about condom negotiation and use among a particularly vulnerable segment of Cambodian FSWs, and indicate important potential disparities in negotiation with paying native and foreign clients and non-paying regular partners.

Conclusion

Since commercial sex in Cambodia was forced underground in 2008, little information has been collected regarding FSWs' condom use practices and characteristics of sex work which potentially affect consistent condom use. Descriptive statistics regarding characteristics of sex work from this study suggest that some known risk factors for inconsistent condom use are prevalent. Condom use negotiation skills were deficient. Promoting condom negotiation and condom use, particularly with foreign clients and with regular non-paying partners, may be a priority for future prevention efforts. This will subsequently contribute to preventing HIV/STI transmission in this population. Additionally, knowledge gained from this study may serve as an important starting point for further rigorous investigations regarding the roles of condom communication and negotiation, and for future development of effective interventions to promote consistent condom use.

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References

1. Saphonn V, Sopheab H, Sun LP, Vun MC, Wantha SS, Gorbach PM, et al. Current HIV/AIDS/STI epidemic: intervention programs in Cambodia, 1993–2003. AIDS Educ Prev. 2004 Jun; 16(3 Suppl A):64–77. [PubMed: 15262566]
2. Annual report 2010: National Center for HIV/AIDS Dermatology and STD. 2011.
3. National AIDS Authority. Cambodia Country Progress Report: Monitoring the Progress towards the Implementation of the Declaration of Commitment on HIV and AIDS. 2010.
4. Hor LB, Detels R, Heng S, Mun P. The role of sex worker clients in transmission of HIV in Cambodia. Int J STD AIDS. 2005 Feb; 16(2):170–4. [PubMed: 15807948]

5. NGO Joint Statistics. End Child Prostitution, Abuse and Trafficking in Cambodia. 2008. Database report on trafficking and rape in Cambodia 2007–2008.
6. Kim AA, Sun LP, Chhorvann C, Lindan C, Van Griensven F, Kilmarx PH, et al. High prevalence of HIV and sexually transmitted infections among indirect sex workers in Cambodia. Sex Transm Dis. 2005 Dec; 32(12):745–51. [PubMed: 16314771]
7. Estimation of the HIV prevalence among general population in Cambodia, 2010. National Center for HIV/AIDS Dermatology and STD; 2011.
8. Epidemilogical Fact Sheet on HIV and AIDS: Cambodia 2008 Update. UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance; 2008.
9. Shahmanesh M, Patel V, Mabey D, Cowan F. Effectiveness of interventions for the prevention of HIV and other sexually transmitted infections in female sex workers in resource poor setting: a systematic review. Trop Med Int Health. 2008 May; 13(5):659–79. [PubMed: 18266784]
10. Gorbach PM, Sopheab H, Chhorvann C, Weiss RE, Vun MC. Changing behaviors and patterns among Cambodian sex workers: 1997–2003. J Acquir Immune Defic Syndr. 2006 Jun; 42(2):242–7. [PubMed: 16639348]
11. Sopheab H, Morineau G, Neal JJ, Saphonn V, Fylkesnes K. Sustained high prevalence of sexually transmitted infections among female sex workers in Cambodia: high turnover seriously challenges the 100% Condom Use Programme. BMC Infect Dis. 2008; 8:167. [PubMed: 19077261]
12. Chhorvann, C. Phnom Penh: National Center for HIV/AIDS, Dematology and STDs. 2010 Dec 30. Behavioral Sentinel Surveillance.
13. Choi SYP, Holroyd E. The influence of power, poverty and agency in the negotiation of condom use for female sex workers in mainland China. Culture, Health & Sexuality. 2007; 9(5):489–503.
14. Ross MW, Crisp BR, Mansson SA, Hawkes S. Occupational health and safety among commercial sex workers. Scand J Work Environ Health. 2012 Mar; 38(2):105–19. [PubMed: 21808944]
15. Cheng SSY, Mak WWS. Contextual influences on safer sex negotiation among female sex workers (FSWs) in Hong Kong: the role of non-governmental organizations (NGOs), FSWs' managers, and clients. AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV. 2010; 22(5):606 – 13.
16. Noar SM. Behavioral interventions to reduce HIV-related sexual risk behavior: review and synthesis of meta-analytic evidence. AIDS Behav. 2008 May; 12(3):335–53. [PubMed: 17896176]
17. Noar SM, Morokoff PJ, Harlow LL. Condom Negotiation in Heterosexually Active Men and Women: Development and Validation of a Condom Influence Strategy Questionnaire. Psychology & Health. 2002; 17(6):711 – 35.
18. Wojcicki JM, Malala J. Condom use, power and HIV/AIDS risk: sex-workers bargain for survival in Hillbrow/Joubert Park/Berea, Johannesburg. Social Science & Medicine. 2001; 53(1):99–121. [PubMed: 11380165]
19. Shannon K, Strathdee SA, Shoveller J, Rusch M, Kerr T, Tyndall MW. Structural and environmental barriers to condom use negotiation with clients among female sex workers: implications for HIV-prevention strategies and policy. American Journal of Public Health. 2009; 99(4):659–65. [PubMed: 19197086]
20. Borne, Fvd. Using Mystery Clients to Assess Condom Negotiation in Malawi: Some Ethical Concerns. Studies in Family Planning. 2007; 38(4):322–30. [PubMed: 18284046]
21. Grayman JH, Nhan DT, Huong PT, Jenkins RA, Carey JW, West GR, et al. Factors associated with HIV testing, condom use, and sexually transmitted infections among female sex workers in Nha Trang, Vietnam. AIDS Behav. 2005 Mar; 9(1):41–51. [PubMed: 15812612]
22. Broaddus M, Morris H, Bryan A. 'It's Not What You Said, It's How You Said It': Perceptions of Condom Proposers by Gender and Strategy. Sex Roles. 2010; 62(9):603–14. [PubMed: 20544008]
23. Otto-Salaj L, Reed B, Brondino MJ, Gore-Felton C, Kelly JA, Stevenson LY. Condom use negotiation in heterosexual African American adults: responses to types of social power-based strategies. J Sex Res. 2008 Apr-Jun;45(2):150–63. [PubMed: 18569536]
24. Williams SP, Gardos PS, Ortiz-Torres B, Tross S, Ehrhardt AA. Urban women's negotiation strategies for safer sex with their male partners. Women Health. 2001; 33(3–4):133–48. [PubMed: 11527101]

25. Zukoski AP, Harvey SM, Branch M. Condom use: exploring verbal and non-verbal communication strategies among Latino and African American men and women. AIDS Care. 2009 Aug; 21(8):1042–9. [PubMed: 20024761]

26. O'Leary A, Moore JS, Khumalo-Sakutukwa G, Loeb L, Cobb D, Hruschka D, et al. Association of negotiation strategies with consistent use of male condoms by women receiving an HIV prevention intervention in Zimbabwe. AIDS. 2003; 17(11):1705–7. [PubMed: 12853758]

27. Cambodia: Country Situation. UNAIDS; 2008.

28. Krishnan S, Dunbar MS, Minnis AM, Medlin CA, Gerdts CE, Padian NS. Poverty, Gender Inequities, and Women's Risk of Human Immunodeficiency Virus/AIDS. Annals of the New York Academy of Sciences. 2008; 1136(1):101–10. [PubMed: 17954681]

29. Langen TT. Gender power imbalance on women's capacity to negotiate self-protection against HIV/AIDS in Botswana and South Africa. African Health Science. 2005 Sep; 5(3):188–97.

30. Murray L, Moreno L, Rosario S, Ellen J, Sweat M, Kerrigan D. The Role of Relationship Intimacy in Consistent Condom Use Among Female Sex Workers and Their Regular Paying Partners in the Dominican Republic. AIDS and Behavior. 2007; 11(3):463–70. [PubMed: 17096198]

31. Aveling E-L. Making sense of 'gender': From global HIV/AIDS strategy to the local Cambodian ground. Health & Place. 2012; 18(3):461–7. [PubMed: 22469530]

32. Thy, C. HIV transmission from husbands to wives in the context of gender/class relations, an urban slum area. Phnom Penh, Cambodia: Mahidol University; 2005.

33. NGO Joint Statistics. End Child Prostitution, Abuse and Trafficking in Cambodia. 2009. Database report on trafficking and rape in Cambodia 2007–2008.

Table I

Condom use negotiation strategies

Strategies	Definitions	Performance possibilities
1. Reward	Person promises or provides positive consequences if partner uses a condom	• Emphasize that sex will be more erotic as a reward for condom use • Introduce the unique design of a condom (e.g. dots, ribs) which will bring about rewarding sensations
2. Emotional coercion	Person threatens to use or uses negative affective consequences in order to persuade partner to use a condom	• Make a pitiful face if partner doesn't want to use a condom • Make partner believe that he will feel sorry for me if a condom is not used • Tell partner that I will feel anxious or frigid instead of sexually aroused during sex if a condom is not used
3. Risk information	Person presents information about the risks of STIs or HIV/AIDS to persuade partner to use a condom	• Tell partner that if we don't use a condom, then one of us could end up with a sexually transmitted infection and/or HIV • Tell partner that using a condom will protect us from sexually transmitted infections and/or HIV/AIDS
4. Seduction	Person uses (nonverbal) sexual arousal to distract or direct partner in order to persuade partner to use a condom	• Start "fooling around" and then pull out a condom when it is time and ask for the use • Get partner very sexually excited and then put a condom on without saying a word • Use mouth to put a condom on during foreplay with oral sex, without saying a word
5. Deception	Person uses false information or deception to get partner to use a condom	• Make up a reason why I want partner to use a condom, even though my real reason is to protect myself against diseases • Make partner think I always use condoms when I have sex, even though sometimes I don t • Pretend that I'm really concerned about pregnancy, when my real concern is sexually transmitted infections
6. Withholding sex	Person states or threatens that sexual activity will be withheld if partner does not use a condom	• Tell partner that I will not have penetrative sex with him if we do not use a condom • Make it clear that I will not have sex if condoms are not used • Refuse to have sex with partner unless a condom is used
7. Relationship conceptualizing	Person uses caring or concern for the partner or relationship in order to get partner to use a condom	• Let partner know that using a condom would show respect for my feelings • Tell partner that it would really mean a lot to our relationship if he would use a condom • Tell partner that using a condom would really show how he cares for me
8. Autocracy	Person uses authority, claims greater knowledge, or flatly insists on condom use	• Tell partner that a condom must be used because I say so • Tell partner that a condom must be used because I am the one who makes important decisions in our relationship
9. Direct request	Person requests the use of condoms in a direct, straightforward manner	• Straightforwardly ask that we use a condom during penetrative sex • Make a direct request to use a condom • Be clear that I want to put a condom on

Note: Definitions and dimensions adapted from Noar et al. (2002)(17).

Table II

Participant socio-demographic characteristics (n = 81)

	n	%
Religion		
No religion	1	1.2
Buddhism	75	92.6
Catholicism	3	3.7
Christian	1	1.2
Islamic	1	1.2
Ethnicity		
Khmer	74	91.4
Vietnamese	7	8.6
Languages spoken		
Cambodian	80	98.8
Vietnamese	11	13.6
English	10	12.3
Chinese	4	4.9
Thailand	2	2.5
French	1	1.2
Education level		
Had not attended elementary school	32	39.5
Highest grade completed (among those who went to school, n=49); mean (SD)	4.65 (2.77)	
Main job prior to sex work		
Unskilled labor	20	24.7
Skilled worker in a factory/company	16	19.8
Private services, saleswoman	13	16.0
Entertainment services	11	13.6
Unemployed or in school (high school or lower)	10	12.4
Unskilled agricultural work	9	11.1
Marital status (n=76)		
Never married and no live-in regular partner	27	35.5
Has a live-in regular partner	14	18.4
Married	4	5.3
Divorced/Separated	13	17.1
Widowed	18	23.7

Table III

Characteristics of participants' sex work (n=81)

	n	%	Mean	Standard deviation
Age at first traded sex			20.95	4.92
Years in sex work (n=60)				
1 year or less	21	35		
More than 1 year	39	65		
Used a condom at first traded sex				
Yes	43	53.1		
Who asked for condom use at first traded sex? (n=43)				
I asked or put in on	28	65.1		
The client asked or put in on	15	34.9		
Primary location to approach clients				
On the street	61	75.3		
Other venues (e.g., beer gardens, bars, or clubs)	13	16.0		
Brothel-based, massage parlors	7	8.6		
Primary location for traded sex				
Workplace or hotels/places familiar to the FSW	40	49.4		
Place designated by the clients	41	50.6		
Number of clients per week			8.05	5.78
Charge for one act of penetrative sex[a] with a condom (in USD) (n=80)				
Minimum amount			7.15	4.56
Maximum amount			13.52	9.72
Charges for one act of penetrative sex[a] without a condom (in USD) (n=15)				
Minimum amount			16.21	12.90
Maximum amount			28.29	25.28
Drank alcohol in the past 4 weeks	42	57.5		
Average times drinking before or during sex for every 10 traded sex episodes			2.48	3.16
Average times having a drunk paying client for every 10 traded sex episodes			4.58	3.05
Ever diagnosed with STIs				
Syphilis	0	0		
Gonorrhea	5	6.2		
Chlamydia	7	8.6		
Trichomoniasis	27	33.3		
Hepatitis B	1	1.2		
Herpes simplex	3	3.7		
HPV	0	0		
Scabies	8	9.9		
HIV status				
Positive	11	13.6		
Negative	53	65.4		
Not been tested	17	21.0		

Notes:

[a] includes both vaginal and anal sex

Table IV

Condom negotiation and condom use practices of FSWs

	With native paying clients (n=80)	With foreign paying clients (n=38)	With non-paying regular partner (n=34)
Condom negotiation			
Type of condom use negotiation strategy typically employed first, n (%)			
Did not negotiate or could not clearly describe how to negotiate	12 (15.0)	11 (29.0) **	23 (67.6) **
Provided risk information	35 (43.8)	6 (15.8)	9 (26.5)
Direct request	15 (18.8)	15 (39.5)	2 (5.9)
Withholding sex	13 (16.3)	3 (7.9)	0 (0)
Seduction	2 (2.5)	1 (2.6)	0 (0)
Median times being refused for every 10 condom-request attempts	2	2	7 **
What participants typically did when first condom-use request was refused (percentages were calculated among those who negotiated condom use), n (%)			
Accept, did not do anything else	0 (0)	1 (3.7)	7 (63.6)
Tried a different negotiation strategy	31 (45.6)	12 (44.4)	4 (36.4)
Withheld penetrative sex and/or offered non-penetrative sex (oral sex or hand job)	26 (38.2)	11 (40.7)	0 (0)
Charged an additional fee for unprotected sex	3 (4.4)	5 (18.5)	0 (0)
Used a second condom-use negotiation strategy (percentages were calculated among those who persuaded partners to use condoms), n (%)	41 (60.3)	14 (51.9)	3 (27.3)
Condom use			
In the past week before being taken into custody, numbers of times having vaginal sex, mean (SD)	6.64 (6.2)	1.24 (1.5)	1.24 (1.7)
In the past week before being taken into custody, numbers of times having vaginal sex without a condom (among those who reported having vaginal sex), mean (SD)	.16 (.7)	.16 (.6)	.85 (1.8)
In the past week before being taken into custody, number of participants who had anal sex, n (%)	7 (8.8)	7 (18.4)	3 (8.8)
In the past week before being taken into custody, numbers of participants who had anal sex without a condom (among those who reported having anal sex), n (%)	3 (42.9)	2 (28.6)	1 (33.3)
Overall condom use (cumulative % of “quite often” and “always”)	(98.8)	(86.9) *	(26.5) **
“Quite often”	11 (13.8)	6 (15.8)	5 (15.2)
“Always”	68 (85.0)	27 (71.1)	4 (12.1)
Used a condom at last sex, n (%)	71 (88.8)	26 (68.4) *	9 (26.5) **

Notes:

* p-values<.05;

** p-values<.01; tests used: Wilcoxon matched-pair signed-rank tests; comparison group: “with native paying clients.”

Table V

Perceived effectiveness of, willingness-to-use, and perceived consequences of condom negotiation strategies (%) (n=78)

Strategies	Ever heard of	Effective to use with native paying clients	Effective to use with foreign paying clients	Effective to use with non-paying regular partners	Willing to use with paying clients	Willing to use with non-paying regular partners
1. Reward	7.7	2.6	2.6	2.6	5.1	1.3
2. Emotional coercion	24.4	17.9	20.5	12.8	46.2	12.8
3. Risk information	30.8	59.0	15.4	21.8	55.1	14.1
4. Seduction	33.3	70.5	25.6	29.5	62.8	32.1
5. Deception	29.5	30.8	12.8	7.7	55.1	11.5
6. Withholding sex	37.2	73.1	33.3	12.8	70.5	19.2
7. Relationship conceptualizing	23.1	19.2	7.7	10.3	30.8	12.8
8. Autocracy	14.1	11.5	11.5	2.6	33.3	7.7
9. Direct request	24.4	56.4	37.2	23.1	51.3	20.5