HHS Public Access

Author manuscript

Int J Public Health. Author manuscript; available in PMC 2017 November 01.

Published in final edited form as:

Int J Public Health. 2016 November ; 61(8): 945–957. doi:10.1007/s00038-016-0875-z.

A human rights-focused HIV intervention for sex workers in Metro Manila, Philippines: evaluation of effects in a quantitative pilot study

Lianne A. Urada,

College of Health and Human Services, School of Social Work, San Diego State University, 5500 Campanile Dr, San Diego, CA 92182, USA. Department of Medicine/Division of Global Public Health, Center on Gender Equity and Health, University of California San Diego, 9500 Gilman Drive, MC 0507, La Jolla, CA 92093-0507, USA

Janie Simmons,

National Development and Research Institutes, Inc., 71 W 23rd St, New York, NY 10010, USA

Betty Wong,

Department of Medicine/Division of Global Public Health, Center on Gender Equity and Health, University of California San Diego, 9500 Gilman Drive, MC 0507, La Jolla, CA 92093-0507, USA

Kiyomi Tsuyuki,

Department of Medicine/Division of Global Public Health, Center on Gender Equity and Health, University of California San Diego, 9500 Gilman Drive, MC 0507, La Jolla, CA 92093-0507, USA

Gerlita Condino-Enrera,

Woodwater Center for Healing, 8 Nicanor Reyes St, Loyola Heights, Quezon City, Philippines

Laufred I. Hernandez,

Department of Behavioral Sciences, University of the Philippines, Manila, Rizal Hall, Padre Faura Street, Ermita, Manila, Philippines

Nymia Pimentel Simbulan, and

College of Arts and Science and College of Public Health, University of the Philippines, Manila, Rizal Hall, Padre Faura Street, Ermita, Manila, Philippines

Anita Raj

Department of Medicine/Division of Global Public Health, Center on Gender Equity and Health, University of California San Diego, 9500 Gilman Drive, MC 0507, La Jolla, CA 92093-0507, USA

Abstract

Correspondence to: Lianne A. Urada.

Compliance with ethical standards

Conflict of interest All authors declare that they have no conflicts of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

Objectives—This study evaluated a brief human rights-focused HIV community mobilization intervention for sex workers in the Philippines, a country with one of the fastest rising number of HIV cases worldwide.

Methods—Five single-session group interventions to reduce sexual risk and increase HIV testing among 86 sex workers in Manila were evaluated with pre–post-test data via Wilcoxon's signed-ranks and Mann–Whitney tests. The 4-h intervention, Kapihan (August–November, 2013), integrated human rights with HIV skill-building. Demographic data, violence/trafficking victimization, human rights knowledge, and intentions to HIV test and treat were collected.

Results—Participants were median aged 23; female (69 %); had children (55; 22 % had 3+ children); used drugs (past 3 months: 16 %); sexually/physically abused by clients (66 %); 20 % street sex workers ever took an HIV test. Pre–post-test scores significantly improved in knowledge of HIV ($z = -8.895$, $p < 0.001$), reproductive health ($z = -3.850$, $p < 0.001$), human rights ($z = -4.391$, $p < 0.001$), ethical rights of research participants ($z = -5.081$, $p < 0.001$), and intentions to HIV test ($z = -4.868$, $p < 0.001$).

Conclusions—Integrating human rights into HIV interventions may empower sex workers to address their health and human rights and test for HIV.

Keywords

Sex work; HIV/AIDS; Human rights; Community mobilization; Violence; Empowerment; Transactional sex; Men who have sex with men (MSM); Female sex workers; Trafficking

Introduction

Statistical modeling shows that eliminating violence may avert HIV infections among female sex workers (FSWs) (Shannon et al. 2015), yet few community empowerment interventions address HIV prevention and violence simultaneously (Kerrigan et al. 2014; Wechsberg et al. 2006). Violence victimization among sex workers has co-occured with other health issues, such as non-optimal HIV testing in Malaysia (Loeliger et al. 2016), and depressive symptoms in other regions (Ulibarri et al. 2013; Patel et al. 2015). Abused FSWs in Bangladesh had more mental and substance use disorders if they were in sex work to support their family or to pay off personal debts (Hengartner et al. 2015).

For male sex workers, e.g., in Vietnam, stigma associated with sex work also co-occured with depression (Oldenburg et al. 2014). Heterosexual and bisexual male sex workers reported more anxiety than other men who had sex with men (MSM) sex workers in the Czech Republic (Bar-Johnson and Weiss 2014). However, male sex workers, MSM, and Transgender females, e.g., in the Philippines, face discrimination, and limited protections, subjecting them to high levels of violence, closeted identities, and fewer employment opportunities (UNDP and USAID 2014).

A theory-based intervention

Our 4-h pilot (single-session) intervention adapted a Community Life Competence Process (CLCP) type approach to community mobilization, with theoretical groundings in Empowerment Theory (Beeker et al. 1998). Empowerment theory posits that community

mobilization requires investment in community development (Beeker et al. 1998). Community empowerment often begins with motivating community members to strengthen and create new community networks/institutions and build leadership skills and community consensus on the importance of health (Beeker et al. 1998). Peer-led outreach and interventions have broken down barriers, including distrust, and stigma among sex workers (George et al. 2015; Oldenburg et al. 2014). This study finds that the community empowerment process is particularly effective with sex workers, and integrates well with human rights education.

The CLCP has been used in the Philippines, as experienced by some of our study's peer youth mobilization partner group members, and was applied in 20 nations to reduce STIs and HIV, increase HIV testing, and increase HIV/STI treatment in vulnerable populations, including sex workers (The Constellation 2015). The CLCP builds on the strengths of a community by bringing them together in a visioning workshop that enables them to voice their deep concerns and hopes for the future to arrive at sustainable solutions (The Constellation 2015).

This study adapts principles used in the CLCP and adds to a growing body of the literature that seeks to position human rights as a central component of HIV prevention and treatment interventions for sex workers. Studies have documented human rights violations faced by sex workers worldwide, especially among substance users, including unlawful arrest and detention, physical and sexual violence (including homicide), forced HIV testing, and discrimination when accessing health services (El-Bassel and Strathdee 2015; Shannon et al. 2015; Decker et al. 2015). A systematic review found that protection of sex workers' human rights is central to enabling them to access HIV testing and treatment (Decker et al. 2015).

The Philippines

The Philippines has one of the fastest growing HIV epidemics worldwide (Geronimo 2015). From 2008 to 2016, new HIV cases increased 523 %, with 804 new cases reported in January 2016 alone (27 new cases/day) (Philippines Department of Health 2016).

During the past 5 years, MSM was disproportionately affected (approximately 6 % of MSM in Quezon City); they comprised 85 % of new cases, 2011–2016 (Philippines Department of Health 2016). Cases among women and injecting drug users (IDUs) are also rising. Those who engaged in transactional sex (buying or selling sex) comprised 10 % of new cases in January 2016. Over 19 % of the population in the Philippines experience extreme poverty (USAID 2016). Many in the sex trade solely support family. The country is approximately 80 % Catholic, 10 % Muslim, and 10 % Protestant; religion plays a strong role in the decisions of policymakers.

For example, the 2012 Responsible Parenthood and Reproductive Health Act passed in the Philippines after years of opposition from the Roman Catholic Church. The Act guarantees (in a country where abortion is illegal) universal access to non-abortifacient reproductive health care (RA 10354), including sex education in the schools, access to condoms, and aims to raise public awareness on how to protect against sexual abuse and violence (Official Gazette 2012; Urada 2014).

Research and community context

The University of California—Philippines collaborative HIV prevention research effort was a five-year collaboration beginning in 2008, aimed to add to the extant literature on sex worker rights, foster community mobilization, and conduct HIV prevention interventions in the Philippines. U.S. researchers worked closely with collaborators from non-government organizations, government, academia, and a peer-led youth organization to develop and conduct interventions with street- and venue-based sex workers. The Peer Educators Movement for Empowerment (Peer Ed ME) Pasay, Manila, Caloocan, and Quezon City (PAMACQ), many of whom were former street youth and sex workers, along with their advisors from established NGOs (Pinoy Competence and the Center for Environment and Sustainable Development Foundation, Inc.), was integral members of the research team. They facilitated the intervention, *Kapihan* and mobilized youth which led to the eventual passage of the 2012 Responsible Parenthood and Reproductive Health Act.

These collaborative-informed interventions were based on formative epidemiological and qualitative research. The first qualitative ethics research study (Urada and Simmons 2014a, b) was conducted in Manila with venue-based sex workers and venue-based managers, following an epidemiological study (Urada et al. 2012, 2013a, b) in which a third of the sex workers reported facing physical and sexual violence from clients. One of the key findings from this study was that female bar/spa workers expressed dissatisfaction with their participation in research studies when they did not see any changes or results from participating in surveys nor received any interventions (Urada and Simmons 2014a, b). Based on this and other key findings, *Kapihan* emerged. The intervention aligns with global priorities to integrate violence prevention into other health platforms (World Health Organization, the United Nations Office on Drug and Crime, and the United Nations Development Programme 2014). This study describes the results of a pilot intervention in terms of its impact on knowledge and on feasibility of implementation.

Methods

A single-armed design was used to evaluate a one-session 4-h intervention, using pre- and post-test survey assessments administered on the same day as the intervention. Formative research included surveys of 500 female bar/spa workers and their managers, four focus groups with bar/spa workers and peer educators, and three community advisory board meetings with public health department, academic, non-government, and peer organizational representatives. Findings informed a more collaborative approach for the intervention design/implementation, determined whether group interventions were feasible, and explored issues to address in the intervention (e.g., violence, HIV testing). The investigator also observed group participants during the interventions and analyzed open-ended survey question responses and intervention transcripts.

Recruitment

Participants were recruited August–November 2013 from Cubao in Quezon City, a large suburb of Metro Manila, known for its high volume of male and female street sex workers and entertainment venues. Peer outreach workers for this study approached the sex workers

in three distinct unofficial territorial areas of the city (occupied by sex worker group "clans"). Those who engaged in commercial sex in the past 6 months were invited. In all, 37 male sex workers and 59 females (40 streets, 19 venue-based) agreed to participate (20 persons per gender separate intervention group). The clans and two nightclub/bars were purposively sampled based on an established relationship with peer outreach workers and NGOs; all agreed to participate.

Five intervention groups were carried out (August–November 2013) with 96 participants. Ten male sex workers inadvertently left at the conclusion of the intervention before answering the self-administered post-test surveys and, therefore, were not included (their baseline characteristics did not differ significantly). All, however, answered the baseline surveys (their characteristics were compared). The research team, including PAMACQ team members, guided participants in self-administering the pre-and post-tests by reading them aloud or assisting them individually. The participants were assigned a number to match their pre-test surveys with their post-test surveys for purposes of analysis.

Institutional Review Boards from the University of the Philippines, Manila, and the University of California, San Diego approved the study procedures. Each participant gave informed consent and received an equivalent of U.S. $20 to compensate for travel and time away from work.

Intervention design

The intervention included the following: HIV and STI education (e.g., where to get tested and seek treatment if they were HIV+), condom demonstrations on how to properly use condoms, dissemination of the principal investigator's prior epidemiological and ethics research results, discussion of the risks involved in their work, education on the existing human rights legislation addressing rape and violence against women and children with a discussion about its applicability to them and how to get help, and goal setting exercises as individuals and as a community. Detailed descriptions of STI types with photos (e.g., genital warts, gonorrhea, herpes, and syphilis) were provided.

The human rights education component focused on raising participant knowledge and understanding of laws protecting the rights of individuals against abuse and discrimination (e.g., physical violence, rape, trafficking, and pornography) (Fig. 1). Facilitators described each act and facilitated a discussion about their implications for the participants or for women they knew (e.g., their wives and girlfriends).

Facilitators shared the results of the formative ethics research (collected from 20 female bar/spa workers and 10 managers), including the perceived barriers and facilitators to consent, disclosure, and intervention participation (i.e., respect, trust, and risks). A discussion followed about the validity of the results, especially fears about harassment from the police (e.g., condoms getting confiscated or planted on them). An aspiration/goal building exercise for the individual and as a community engaged participants in writing or drawing out their needs on one side of a paper, and aspirations on the other, including how to prevent HIV.

Peer youth organization leaders and social workers from NGOs in the community serving HIV positive and high-risk populations facilitated each group in rooms rented in local fast food chain restaurants in the Cubao area (where street sex work took place). The participants did not have to travel far from their usual hang out areas, although they resided in more distant places.

Measures

Items included demographics (months worked as a sex worker, age, education, income, marital status, and number of children), HIV risk behaviors (drug use, intentions to use condoms, take an HIV test, and seek treatment if tested positive), experiences with violence and trafficking, and single items on knowledge (on a scale of 1–10; 1 = no knowledge) about HIV, STIs, reproductive health rights, human rights, and ethics when conducting research. Knowledge of HIV transmission had specific categorical responses. Participants also answered whether they would join an organization that addressed their health and human rights (Fig. 2).

Open-ended questions asked them to list their strengths, needs, goals, and concerns regarding force/coercion, violence, sex trafficking and human rights, and participating in HIV prevention programs, research studies, and surveys (Fig. 3).

Data analysis

The study used descriptive analyses to characterize the sample and Wilcoxon signed-rank tests to determine statistically significant changes in pre- and post-test scores on measures of knowledge and intention. *T* test statistics were used for the specific HIV transmission knowledge items. Bivariate analyses were run to determine whether participants were significantly different in demographic profile (age, education, marital status, length of time in sex work, and pretest measures on knowledge and intentions) for males who had post-test scores and those who did not.

Results

The participants' median age was 23 (Interquartile range (IQR): 20–28). The median number of months in sex work was 18 (IQR:2–59). Over two-thirds (69 %) were female. Mean educational level was 9 years (standard deviation; 2.9; range 1–15). Median income was 1000 pesos (IQR: 500–1200) or US$22.6. Medians were used where the distributions of data were skewed.

Nearly half (43 %) were married or living with a partner. Over half (55 %) had children; 18 % had a child prior to age 18 years; 22 % had 3 or more children; 16 % used drugs (past 3 months); 66 % had a history of physical (38 %) or sexual violence (37 %) from clients.

At baseline, all groups had very low knowledge of HIV transmission routes (vaginal and anal sex, breast milk, mother–child in utero, and syringe); 29 % reported no HIV knowledge (5 % scored 10, very high knowledge). Twenty percent had no knowledge of human rights, 22 % had no reproductive rights knowledge, and 27 % had very high reproductive health knowledge.

The scales measuring knowledge were analyzed by median, because initially, these were interval scales, but the knowledge items had a skewed distribution, so a median split was used. In terms of their awareness of their ethical rights as research participants, male and street female sex workers had low median scores at baseline (3 and 4) and venue-based females had a median score of 9 (7–10). Intentions to use condoms consistently in the next 3 months with both regular and casual partners were very low among all groups at baseline, except for street female sex workers with casual partners. Although 63 % of venue-based female sex workers reported ever having received an HIV test in a previous survey from the study, only 19 % of street-based female sex workers and 20 % of male sex workers had ever taken an HIV test despite engaging in sex work for a median of 18 months (IQR: 2–59). Most participants (86 %) wished to join an organization addressing their health and human rights.

The results are broken down by gender and street- vs. venue-based females in Tables 1 and 2. The differences were not significant between males who took the post-test and those who did not ($n = 10$). Although they worked a higher median number and wider range of months on the street, 49 (4–72) vs. 17 (9–44), they were similar in all other characteristics. Males who did not take the post-tests were a median of 19 (17–21) years old, median education 10 (7–11) years, approximately 50 % were married or living with a partner, and had a median income of 420 (200–500). They had a median score of 5 (4–6) for reproductive health rights knowledge, a median score of 4 (3–5) for HIV knowledge, a median score of 3 for knowledge of STIs, human rights, and of the ethical rights of research participants, and a median score of 5 (3–8) for intentions to take an HIV test in the next 3 months.

Findings revealed significant improvements across groups in knowledge related to HIV ($z = -8.8953$, $p = 0.0001$), reproductive health ($z = -3.850$, $p = 0.001$), and human rights ($z = -4.391$, $p = 0.0001$) from pre-test to post-test, with the exception of street female sex workers who scored high on both tests for reproductive health rights knowledge, and for venue-based female sex workers who scored high on both tests for human rights. Knowledge of the ethical rights for research participants also increased significantly from pre- to post-test for all groups.

For knowledge of HIV transmission, a few items significantly changed from pre- to post-test. Kissing as a perceived mode of HIV transmission decreased. HIV transmission through breast milk, mother-to-child transmission in utero, and blood transfusion/receiving blood increased at $p < 0.10$ level or below. Perception about HIV transmission via sharing needles remained at 52 % at post-test. The differences did not vary much across populations. Male sex workers increased their perception of HIV transmission via anal sex by 7 % and by 11 % for vaginal sex. Female street sex workers increased their perception of HIV transmission risk via vaginal sex by 12 %.

Intentions to use condoms consistently in the next 3 months with both regular and casual partners increased significantly across groups from pre- to post-test, except for street-based female sex workers who maintained a high intent to use condoms consistently with casual partners at pre- and post-test.

Intent to test for HIV in the next 3 months also increased significantly for street female sex workers and male sex workers. No significant change in intent to get treated if tested positive for HIV occurred for any group pre- to post-test as intentions remained high.

Discussion

Findings from this study indicate that participants in the *Kapihan* intervention may have attained higher perceived knowledge about HIV/STIs, human rights, reproductive rights, and the ethical rights of research participants, and increased intentions to test for HIV and use condoms more consistently. These findings help reinforce studies carried out in South Africa and India documenting the need for harm reduction interventions that address violence among sex workers (Beattie et al. 2010; Wechsberg et al. 2006). Nearly two-thirds of the sex workers in this study experienced violence from clients in their lifetime.

The *Kapihan* intervention parallels HIV prevention efforts that address the human rights of high-risk and HIV positive populations (Barr et al. 2011; Swendeman et al. 2009). The cooperative research methodology integrated the dissemination of results of the investigator's previous research (Urada et al. 2012, 2013a, b, 2016; Urada and Simmons 2014a, b) via Community Advisory Board meetings with female and male sex workers with a group building intervention that addressed gaps in knowledge around HIV/STIs, human rights, and reproductive health rights via interactive educational interventions. A few other studies have integrated reproductive health and human rights concerns into HIV interventions with sex workers, despite reproductive health awareness and contraception access being a problem for sex workers in many settings (Becker et al. 2012; McDougal et al. 2013; Oza et al. 2015). Similarly, a few HIV interventions address violence (Beattie et al. 2010; Wechsberg et al. 2006), despite its potential to increase risk (Decker et al. 2015).

Knowledge of HIV, coupled with low knowledge about how to access information about human rights and reproductive health rights in this population, remains problematic. Remarkably, only 1 out of 5 street sex workers in this study ever took an HIV test, despite having a median of over 18 months in sex work. Intention to test for HIV significantly increased after the intervention possibly, because the facilitator provided a description and answered questions about testing. The fact that few had tested for HIV in this sample speaks to the persistent problem with barriers to testing in the Philippines, despite the skyrocketing incidence of HIV in the Philippines.

Case finding is still a challenge for carrying out test-and-treat programs. The Philippine AIDS Law (Republic Act 8504) requires opt-in testing, i.e., voluntary, written informed consent during the testing process (Republic of the Philippines (1997). However, the Centers for Disease Control since 2006 has recommended an opt-out approach to HIV testing, wherein testing is performed unless the patient specifically declines to be tested (Branson et al. 2006). A study by Young and colleagues (2009) looking at HIV testing procedures demonstrated that opt-out may increase testing rates for stigmatized diseases and lessen the effects of stigma in people's reluctance to test. This issue is generalizable to many places in the world where the compulsory offer of an HIV test is still necessary (Bassett and Walensky 2010).

Furthermore, as HIV testing increases and new cases emerge, the need to adequately inform individuals and communities about how to access HIV services and treatment is critical. The *UNDP/USAID Being LGBT in Asia: The Philippines Country Report* (2014) describes a gap in disseminating information on how to obtain treatment once individuals test positive for HIV. Small-scale intervention projects such as the one piloted in this study may have the potential to inform both individuals and the national health information systems for HIV, as in the case of a multilevel intervention in Guatemala (Barczyk et al. 2010).

As HIV infections among the MSM population skyrocket in the Philippines, the rise of HIV transmission among injecting drug users and women needs attention as well. In this study, half of male sex workers had female partners uninvolved in the sex trade. The male sex workers reported extremely low consistent condom use with casual and regular partners. Male sex workers are also at high risk for both violence and HIV (Baral et al. 2014; Bobashev et al. 2009). The lack of anti-discrimination legislation and police protection for MSM and sex work populations in general needs urgent attention in the Philippines (UNDP and USAID 2014).

Methodological study limitations

The results of this study should be interpreted cautiously given the methodological limitations of this study. The study was a pilot test of an intervention without a control group. Questioning just before and after an intervention impedes our ability to assume sustainable effects or assess behavior change. The surveys were self-administered; some had difficulty filling out the surveys, especially those who appeared under the influence of drugs/alcohol. Some were far along in their pregnancy. To adjust for this, a facilitator reads the questions out loud to the group and other research team members helped those individually who needed it. Participants may also have given socially desirable answers. Their intent to test for HIV and seek treatment did not necessarily reflect an ability to follow through with a test or find treatment. Follow up measures of their testing and treatment behaviors would be ideal.

Excepting the question on HIV transmission, more specific scales may be necessary to better capture knowledge change about human rights, reproductive health, and the ethical rights of research participants without unduly burdening the research participant in these contexts. Further larger scale evaluation is needed and should include random assignment to intervention and comparison groups, long-term follow-up to determine sustainability of effects, and HIV/STI viral outcomes instead of self-report only.

Finally, the human rights feature of the intervention primarily centered on the discussion of laws intended to protect the human rights of vulnerable groups. The intervention program did not touch upon other important human rights principles and approaches like meaningful participation of stakeholders in decision and policy-making, holding duty-bearers/state agents accountable with their human rights obligations, and role of ensuring access to justice.

Conclusions

Findings from this study demonstrate the feasibility of mobilizing female and male sex workers in the Philippines and integrating human rights education into HIV prevention approaches. Although intentions to seek HIV treatment if tested positive was already high, the *Kapihan* intervention may have had an impact on intentions to take an HIV test and on knowledge about HIV transmission. Low HIV testing among street-based sex workers indicates a need for more targeted HIV testing for those who do not attend STI clinics regularly offered by the government. More compulsory offering of HIV testing in the general population is necessary too, because the rise in HIV cases among MSM could be an artifact of increased testing for only that population. Attention may be needed on the smaller but steadily growing numbers of HIV + injecting drug users, children, and women (especially for those with male sex worker partners), compared with previous decades.

Nearly two-thirds of participants also expressed interest in joining an organization that addressed the health and human rights of sex workers. Scale up of community empowerment, mobilization, and other structural interventions are needed to reduce violence that affects the HIV risk and reproductive health of sex workers (Kerrigan et al. 2014; Shannon et al. 2015; Swain et al. 2011).

This study also has implications for global violence prevention efforts and global South–North collaborations. The World Health Organization's Violence Prevention Alliance, United Nations' 2030 Agenda, indicates that many countries, including the Philippines, need to develop mental health and adult protective services, which includes scaling up prevention programs that complement victim services and reduce the need for services (WHO 2014) (p. 49). Our findings support this agenda by demonstrating the feasibility of incorporating human rights education and community mobilization methodology into public health violence prevention programs. Global South–North collaborations, such as the one used in this study, can serve as a way to globally disseminate best practices on how to mobilize support for human rights facing marginalized populations, while reducing barriers to HIV testing and treatment.

Acknowledgments

The authors acknowledge Josefina Pavico (Pinoy Competence and the Center for Environment and Sustainable Development Foundation, Inc.) and Jay Caparida, Junelyn Tabelin, and other Peer Educators Movement for Empowerment (Peer Ed ME) Pasay, Manila, Caloocan, and Quezon City (PAMACQ) members for their work on this project. The authors also acknowledge Dr. Donald E. Morisky for his early guidance on conducting research with this population in the Philippines. This project was supported by the Fordham University HIV and Drug Abuse Prevention Research Ethics Training Institute Research supported by NIDA Grant #1R25 DA031608-01 (Celia B. Fisher, Ph.D., Principal Investigator), the National Institutes of Drug Abuse (T32DA023356, R01DA028692-04S1; K01DA036439 PI: Urada), and the University of California Los Angeles International Institute.

Funding This study was funded by the Fordham University HIV and Drug Abuse Prevention Research Ethics Training Institute Research supported by National Institutes of Drug Abuse Grant #1R25 DA031608-01 (Celia B. Fisher, Ph.D., Principal Investigator), the National Institutes of Drug Abuse (Grant Number T32DA023356; R01DA028692-04S1; K01DA036439 PI: Urada), and the University of California Los Angeles International Institute.

References

Baral SD, Friedman MR, Geibel S, Rebe K, Bozhinov B, Diouf D, Sabin K, Holland CE, Chan R, Cáceres CF. Male sex workers: practices, contexts, and vulnerabilities for HIV acquisition and transmission. Lancet. 2014; 385(9964):260–273. DOI: 10.1016/S0140-6736(14)60801-1 [PubMed: 25059939]

Barczyk J, Garcıa J, Casabona J. The potential contribution of small-scale intervention projects in the field to the national health information system for HIV and sexually transmitted infections: a case study of a multilevel intervention in Guatemala. Int J Public Health. 2010; 55:693–699. [PubMed: 20703508]

Bar-Johnson M, Weiss P. Mental health and sexual identity in a sample of male sex workers in the Czech Republic. Med Sci Monit. 2014; 20:1682–1686. DOI: 10.12659/MSM.891092 [PubMed: 25239091]

Barr D, Amon JJ, Clayton M. Articulating a rights-based approach to HIV treatment and prevention interventions. Curr HIV Res. 2011; 9(6):396–404. DOI: 10.2174/157016211798038588 [PubMed: 21999775]

Bassett IV, Walensky RP. Integrating HIV screening into routine health care in resource-limited settings. Clin Infect Dis. 2010; 50(Supplement 3):S77–S84. DOI: 10.1086/651477 [PubMed: 20397960]

Beattie TS, Bhattacharjee P, Ramesh BM, Gurnani V, Anthony J, Isac S, Mohan HL, Ramakrishnan A, Wheeler T, Bradley J, Blanchard JF, Moses S. Violence against female sex workers in Karnataka state, south India: impact on health, and reductions in violence following an intervention program. BMC Public Health. 2010; 10:476.doi: 10.1186/1471-2458-10-476 [PubMed: 20701791]

Becker M, Ramanaik S, Halli S, Blanchard JF, Raghavendra T, Bhattacharjee P, Moses S, Avery L, Mishra S. The intersection between sex work and reproductive health in Northern Karnataka, India: identifying gaps and opportunities in the context of HIV prevention. AIDS Res Treat. 2012; 2012:842576.doi: 10.1155/2012/842576 [PubMed: 23346390]

Beeker C, Guenther-Grey C, Raj A. Community empowerment paradigm drift and the primary prevention of HIV/AIDS. Soc Sci Med. 1998; 46(7):831–842. [PubMed: 9541069]

Bobashev GV, Zule WA, Osilla KC, Kline TL, Wechsberg WM. Transactional sex among men and women in the south at high risk for HIV and other STIs. J Urban Health. 2009; 86(Supplement 1): 32–47. DOI: 10.1007/s11524-009-9368-1 [PubMed: 19513853]

Branson BM, Handsfield HH, Lampe MA, et al. Centers for Disease Control and Prevention (CDC) Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR Recomm Rep. 2006; 55(RR-14):1–17.

Decker MR, Crago A-L, Chu SKH, Sherman SG, Seshu MS, Buthelezi K, Dhaliwal M, Beyrer C. Human rights violations against sex workers: burden and effect on HIV. Lancet. 2015; 385:186–199. [PubMed: 25059943]

El-Bassel N, Strathdee SA. Women who use or inject drugs: an action agenda for women-specific, multilevel, and combination HIV prevention and research. J Acquir Immune Defic Syndr. 2015; 69(Suppl 2):S182–190. DOI: 10.1097/QAI.0000000000000628 [PubMed: 25978486]

George A, Blankenship KM, Biradavolu MR, Dhungana N, Tankasala N. Sex workers in HIV prevention: from Social Change Agents to Peer Educators. Glob Public Health. 2015; 10(1):28–40. [PubMed: 25359518]

Geronimo, JY. [Accessed on 10 May 2016] WHO: PH has fastest growing HIV epidemic in the world. 2015. http://www.rappler.com/nation/93839-who-ph-response-hiv

Hengartner MP, Islam MN, Haker H, Rössler W. Mental health and functioning of female sex workers in Chittagong. Bangladesh. Front Psychiatry. 2015; 6:176.doi: 10.3389/fpsyt.2015.00176 [PubMed: 26696911]

Kerrigan D, Kennedy CE, Morgan-Thomas R, Reza-Paul S, Mwangi P, Win KT, McFall A, Fonner VA, Butler J. A community empowerment approach to the HIV response among sex workers: effectiveness, challenges, and considerations for implementation and scale-up. Lancet. 2014; 385(9963):172–185. DOI: 10.1016/S0140-6736(14)60973-9 [PubMed: 25059938]

Loeliger KB, Marcus R, Wickersham JA, Pillai V, Kamarulzaman A, Altice FL. The syndemic of HIV, HIV-related risk and multiple co-morbidities among women who use drugs in Malaysia: Important targets for intervention. Addict Behav. 2016; 53:31–39. DOI: 10.1016/j.addbeh.2015.09.013 [PubMed: 26436520]

McDougal L, Strathdee SA, Rangel G, Martinez G, Vera A, Sirotin N, Stockman JK, Ulibarri MD, Raj A. Adverse pregnancy outcomes and sexual violence among female sex workers who inject drugs on the United States-Mexico border. Violence Vict. 2013; 28(3):496–512. [PubMed: 23862312]

Official Gazette. [Accessed on 12 February 2015] Republic Act No. 10354. The Responsible Parenthood and Reproductive Health Act. 2012. http://www.gov.ph/2012/12/21/republic-act-no-10354/

Oldenburg CE, Biello KB, Colby D, Closson EF, Mai T, Nguyen T, Nguyen NA, Mimiaga MJ. Stigma related to sex work among men who engage in transactional sex with men in Ho Chi Minh City. Vietnam. Int J Public Health. 2014; 59(5):833–840. [PubMed: 24858522]

Oza KK, Silverman JG, Bojorquez I, Strathdee SA, Goldenberg SM. Examining negative effects of early life experiences on reproductive and sexual health among female sex workers in Tijuana, Mexico. Int J Gynaecol Obstet. 2015; 128(2):169–173. DOI: 10.1016/j.ijgo.2014.08.014 [PubMed: 25458416]

Patel SK, Saggurti N, Pachauri S, Prabhakar P. Correlates of mental depression among female sex workers in southern india. Asia Pac J Public Health. 2015; 27(8):809–819. DOI: 10.1177/1010539515601480 [PubMed: 26307144]

Philippines Department of Health. [Accessed on May 10, 2016] HIV/AIDS Registry Report, January 2016. 2016. http://aidsdatahub.org/hivaids-and-art-registry-philippines-January-2016-epidemiology-bureau-department-health-2016

Republic of the Philippines. Republic Act 8504: The Philippine AIDS Prevention and Control Act. Manila: Tenth Congress; Jul. 1997 http://www.gov.ph/1998/02/13/republic-act-no-8504/ [Accessed on 23 November 2015]

Shannon K, Strathdee SA, Goldenberg SM, Duff P, Mwangi P, Rusakova M, Reza-Paul S, Lau J, Deering K, Pickles MR, Boily MC. Global epidemiology of HIV among female sex workers: influence of structural determinants. Lancet. 2015; 385(9962):55–71. DOI: 10.1016/S0140-6736(14)60931-4 [PubMed: 25059947]

Swain SN, Saggurti N, Battala M, Verma RK, Jain AK. Experience of violence and adverse reproductive health outcomes, HIV risks among mobile female sex workers in India. BMC Public Health. 2011; 11:357.doi: 10.1186/1471-2458-11-357 [PubMed: 21599984]

Swendeman D, Basu I, Das S, Jana S, Rotheram-Borus MJ. Empowering sex workers in India to reduce vulnerability to HIV and sexually transmitted diseases. Soc Sci Med. 2009; 69:1157–1166. DOI: 10.1016/j.socscimed.2009.07.035 [PubMed: 19716639]

The Constellation. [Accessed on 16 April 2016] Community Life Competence Process. 2015. at http://communitylifecompetence.org/

Ulibarri MD, Hiller SP, Lozada R, Rangel MG, Stockman JK, Silverman JG, Ojeda VD. Prevalence and characteristics of abuse experiences and depression symptoms among injection drug-using female sex workers in Mexico. J Environ Publ Health. 2013; 2013(2013):631479.doi: 10.1155/2013/631479

UNDP, USAID. Being LGBT in Asia: The Philippines Country Report. Bangkok: 2014. https://www.usaid.gov/sites/default/files/documents/1861/2014%20UNDP-USAID%20Philippines%20LGBT%20Country%20Report%20-%20FINAL.pdf

Urada, LA. [Accessed on 16 February 2015] A green light for reproductive rights in the Philippines. East Asia Forum. 2014. http://www.eastasiaforum.org/2014/08/15/a-green-light-for-reproductive-rights-in-the-philippines/

Urada LA, Simmons J. A collaborative methodology for investigating the ethical conduct of research on female sex workers in the Philippines. J Empirical Res Human Res Ethics. 2014a; 9(1):29–40. DOI: 10.1525/jer.2014.9.1.41

Urada LA, Simmons J. Social and structural constraints on disclosure and informed consent for HIV survey research with female sex workers and their managers in the Philippines. J Empirical Res Human Res Ethics. 2014b; 9(1):41–45. DOI: 10.1525/jer.2014.9.1.29

Urada LA, Morisky DE, Pimentel-Simbulan N, Silverman JG, Strathdee SA. Condom negotiations among female sex workers in the Philippines: environmental influences. PLoS ONE. 2012; 7(3):1–9. DOI: 10.1371/journal.pone.0033282

Urada LA, Morisky DE, Hernandez LI, Strathdee SA. Social and structural factors associated with consistent condom use among female entertainment workers trading sex in the Philippines. AIDS Behav. 2013a; 17(2):523–535. DOI: 10.1007/s10461-011-0113-x [PubMed: 22223297]

Urada LA, Strathdee SA, Morisky DE, Schilling RF, Pimentel-Simbulan N, Estacio LR Jr, Raj A. Sex work and its associations with alcohol and methamphetamine use among female bar and spa workers in the Philippines. Asia Pac J Public Health. 2013b; 26(2):138–146. DOI: 10.1177/1010539512471969 [PubMed: 23343641]

Urada LA, Halterman S, Raj A, Tsuyuki K, Pimentel Simbulan N, Silverman JG. Socio-structural and individual risk factors associated with history of being trafficked as female bar/spa entertainer in the sex trade in the Philippines. Int J Gynecol Obstet. 2016; 132(1):55–59.

USAID, Dy-liacco G. Development assistance specialist in USAID/Philippines: Extreme poverty in the Philippines. Office of Program Resources Management; https://www.usaid.gov/frontiers/2014/publication/section-1-extreme-poverty-philippines [Accessed 10 May 2016]

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(2): 131–137. DOI: 10.1007/s10461-005-9036-8 [PubMed: 16482408]

World Health Organization, the United Nations Office on Drug and Crime, and the United Nations Development Programme. [Accessed on 11 May 2016] Global Status Report on Violence Prevention. Violence Prevention Alliance, United Nations' 2030 Agenda. 2014. at http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/

Young SD, Monin B, Owens D. Opt-out testing for stigmatized diseases: a social psychological approach to understanding the potential effect of recommendations for routine HIV testing. Health Psychol. 2009; 28(6):675–681. [PubMed: 19916635]

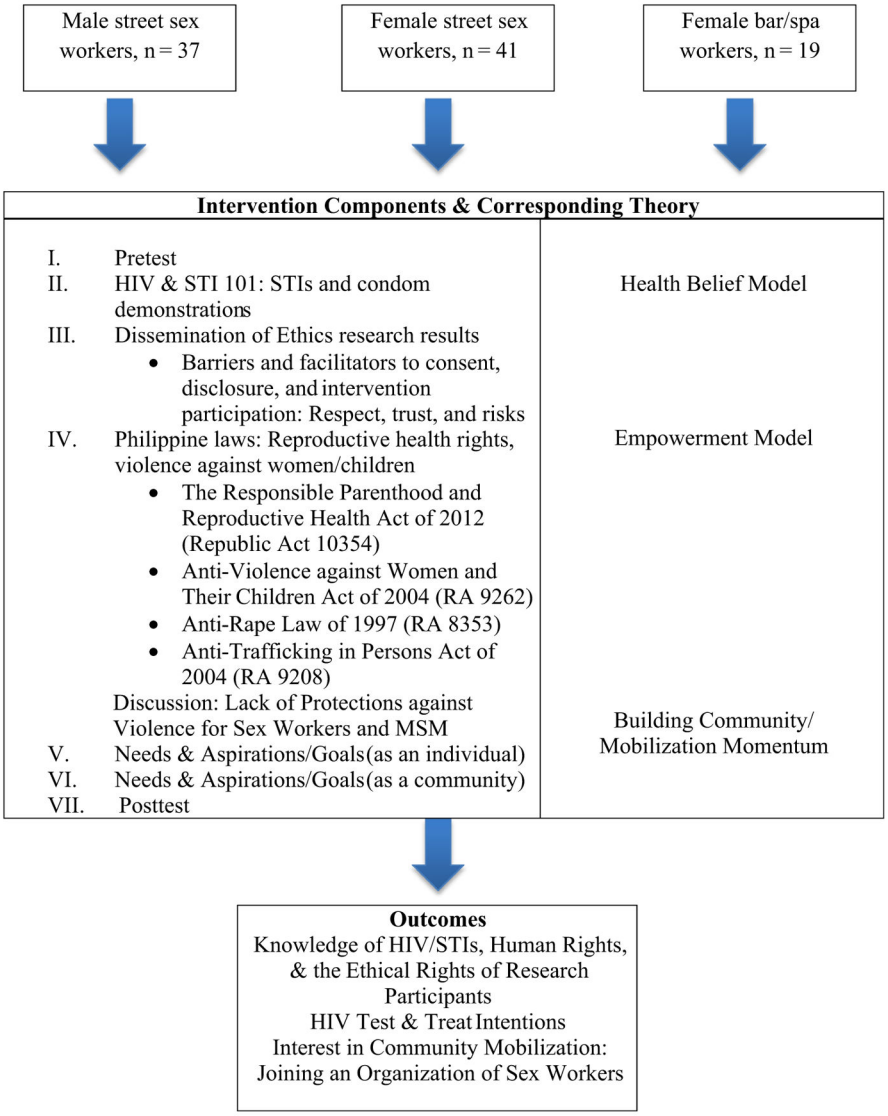

Fig. 1.

Conceptual framework and intervention components of "*Kapihan,*" for sex workers in Metro Manila, Philippines (n = 96) (August–November 2013). The Anti-Violence Against Women and Their Children Act of 2004 was addressed in the same way with the men as with the women, but a discussion about what the male participants could do if they experienced violence and rape, especially in their work, also followed. Laws that purport to protect individuals from violence tend not to specify protections for male survivors of sexual assault or for those with different sexual orientations and gender identities. The Philippines National Police does not index hate crimes for these groups and only operates a Women and Children's desk to address violence against women and children (UNDP, USAID, 2014). Therefore, men who have sex with men face difficulty in getting redress for violent acts against them and, therefore, may not report them (UNDP, USAID, 2014)

Knowledge (Scale of 1-10)

How much do you think you know about the condition called HIV/AIDS?

How much do you know about other STIs (sexually transmitted infections)?

How much do you know about human rights of sex workers or entertainers, women, and youth?

How much do you know about reproductive health rights (e.g. family planning, contraceptives, condoms)?

How much do you know about your rights as a research participant?

How is HIV transmitted? **(Categorical- Yes-No for each):** *Unprotected vaginal sex, Unprotected anal sex, Unprotected oral sex, Kissing, Mother to child in utero, Breast milk, Sharing syringes, Blood transfusion/receiving blood, All of above, Don't know*

Violence and Trafficking (Yes-No)

Have you ever experienced the following violence or abuse against you in your work as an entertainer or street sex worker? (Both physical and sexual response items were included.)

Have you ever been trafficked (tricked or forced) into a job as an entertainer or street sex worker?

HIV Test and Treat (Scale of 1-10)

How certain are you that you will take an HIV test in the next 3 months?

If you were to learn now that you are HIV positive, how certain are you that you would seek treatment for HIV in the next 3 months?

Condom use (Scale of 1-10)

How often do you think you would use condoms with your regular sexual partner(s) in the next 3 months?

How often do you think you would use condoms with your casual sexual partners in the next 3 months?

Community Mobilization (Yes-No)

Have you participated in community mobilization activities around your health and human rights as sex workers or entertainers in the past 6 months?

Would you participate in an organization that addresses health and human rights of sex workers in the next 3 months?

Fig. 2.

Pre- and post-test survey measures for "*Kapihan,*" participants in Metro Manila, Philippines (n = 96) (August–November 2013)

During the intervention, female and male participants said they experienced abuse and bullying from others, including the police. A discussion occurred about the discrimination sex workers encountered. If a male experienced rape or violence, the males did not know who would believe them and they talked about feelings of shame.

> What I do not like about this is that when I was young, I was forcibly used by people who were older than me, who were also using younger people. Here they [younger people] have no choice but to give in and be used and abused physically and verbally. (Male participant)

One participant asked how to prove a man had been raped. The social work facilitator explained about tests done and the doctor searching for evidence of bruising in the genitalia. She further stressed that once the men realize they had been raped, they have the right to complain.

> The male participant said that reporting they had been raped is something they would not do because it is a big embarrassment for men. Another reason for not reporting is "Will anybody believe that they had been raped?"

Both male and female groups talked about violence occurring in their relationships with their spouses.

> Sometimes, women who work in a night bar or club are not treated properly by their husbands/ being beaten up. One should leave them and have self -respect. (Female participant)

In open-ended survey responses to the question about their concerns regarding force/coercion, violence, sex trafficking and human rights, a male participant said, "This usually happens because of one's own objective of earning money through selling one's body." Another said they wished "to have a broad knowledge of all that I should do - learn first the Do's and Don't's."

During their goal/aspiration building exercises, most dreamt about finding more "decent work" to support their families, finishing school, starting a business, and wishing they had more respect from others for their work in a bar/club. Some were the only ones financially supporting their families, including their children, sending siblings to school, and helping a sick sibling or parents who adopted them. They were emotional during the group and shared openly with each other. A few street female sex workers appeared more distracted, sad, and possibly under the influence of drugs or alcohol during the intervention. Several of the female street sex workers were visibly pregnant. The group of young males also discussed their concerns about taking an HIV test.

Reasons provided by participants who do not go for HIV testing included: (1) not knowing where to go for testing; (2) not knowing the costs involved; and. (3) what to do when they learn that they are positive.

During the intervention, the facilitator responded to the last of these reasons by explaining what happens during pre- and post- counseling. She assured them that people who are HIV positive may still get married, bear children, and live normal lives because of anti-retroviral (ARV) drugs. One participant asked if he was hypothetically HIV positive and was taking ARV, could he still transmit the virus. He was shocked and speechless with the realization that HIV is a "lifetime achievement award."

Fig. 3.
Open-ended survey question responses and intervention transcripts

Table 1

Socio-behavioral demographics of sex workers in Metro Manila, Philippines (n = 87) (August–November, 2013)

	Total % (*N*)	Females (venue-based) (*n* = 19)	Females (street-based) (*n* = 41)	Male sex workers (*n* = 27)
Median months in sex work (IQR)[a]	18 (2–59)	29 (3–50)	59 (26–84)	17 (9–44)
Median age in years (IQR)	23 (20–28)	23 (21–26)	25 (21–35)	21 (18–28)
Mean years of education (standard deviation; range)	9 (2.9; 1–15)	10 (2.1; 6–13)	8 (2.5; 1–12)	10 (3.6; 3–15)
Median income (“most made in an average day at work”) (IQR) (1000 pesos = US $22.6)	1000 (500–1200)	1000 (900–2000)	1000 (500–1500)	456 (100–500)
Married or living with partner	50 (43)	42 (8)	60 (24)	41 (11)
Partner is also in sex work	10 (9)	0	23 (9)	0
Has children	55 (47)	58 (11)	55 (22)	52 (14)
Had a child before age 18	18 (16)	16 (3)	15 (6)	11 (3)
Had 3+ kids	22 (19)	11 (2)	20 (8)	33 (9)
Drug use (past 3 months)	16 (14)	0	23 (9)	19 (5)
Violence or abuse experienced as an entertainer or street sex worker	66 (57)	63 (12)	73 (29)	59 (16)
Physical	44 (38)	37 (7)	55 (22)	33 (9)
Sexual	43 (37)	53 (10)	50 (20)	26 (7)
Ever trafficked	35 (30)	0	58 (23)	26 (7)
Ever mobilized	27 (23)	32 (6)	33 (13)	15 (4)
Would join an organization of sex workers	86 (74)	100 (19)	75 (30)	93 (25)
Baseline knowledge of HIV transmission via				
Sharing syringes	52 (45)	79 (15)	53 (21)	33 (9)
Mother to child in utero	51(44)	58 (11)	60 (24)	33 (9)
Breast milk	35 (30)	37 (7)	45 (18)	19 (5)
Unprotected vaginal sex	73 (63)	95 (18)	65 (26)	67 (18)
Unprotected anal sex	66 (57)	84 (16)	58 (23)	67 (18)
Oral sex	57 (49)	84 (16)	53 (21)	44 (12)
Kissing	41 (35)	53 (10)	48 (19)	22 (6)
Blood transfusion/receiving blood	58 (50)	79 (15)	58 (23)	44 (12)
All	24 (21)	21 (4)	38 (15)	7 (2)
Do not know	24 (21)	16 (3)	40 (16)	7 (2)
Ever received a HIV test	29 (25)	63 (12)[b]	20 (8)	19 (5)

[a] *IQR* interquartile range; medians were used when data had a skewed distribution

[b] Previously reported for this population

Table 2

Median score changes in HIV knowledge and rights of sex workers (n = 87) (Wilcoxon signed-rank tests) in Metro Manila, Philippines (August–November 2013)

	Pretest score (range)	Posttest score (range)	Wilcoxon signed-rank/Mann–Whitney test	*p*-value
Reproductive health rights knowledge (1–10)				
Male sex workers	5 (1–8)	6 (4–10)	−2.289	0.022
Females (street)	7 (3–10)	9 (5–10)	−1.789	0.074
Females (venue)	9 (7–10)	10 (8–10)	−1.494	0.135
Human rights knowledge (1–10)				
Male sex workers	3 (1–6)	6 (4–8)	−3.462	0.001
Females (street)	5 (3–6)	8 (3–10)	−2.827	0.005
Females (venue)	10 (8–10)	10 (9–10)	−0.790	0.43
Knowledge of ethical rights for research participants				
Male sex workers	3 (1–5)	6 (1–9)	−2.513	0.012
Females (street)	4 (1–8)	8 (4–10)	−3.337	0.001
Females (venue)	9 (7–10)	10 (8–10)	−3.006	0.003
HIV knowledge (1–10)				
Male sex workers	3 (1–5)	7 (3–10)	−3.353	0.001
Females (street)	3 (1–5)	5 (4–10)	−4.246	0.001
Females (venue)	5 (3–7)	10 (8–10)	−3.717	0.001
Other STI knowledge (1–10)				
Male sex workers	2 (1–5)	5 (3–10)	−3.097	0.002
Females (street)	5 (2–5)	7 (4–10)	−4.115	0.001
Females (venue)	6 (4–7)	9 (7–10)	−3.581	0.001
	% (*N*)	% (*N*)	(*T*-test statistic)	*p*-value
Knowledge of HIV transmission via				
Sharing syringes	52 (45)	52 (45)	0.000	1.000
Mother to child in utero	51 (44)	63 (54)	−1.790	0.077
Breast milk	35 (30)	58 (50)	−3.020	0.003
Unprotected vaginal sex	73 (63)	78 (67)	−1.000	0.320
Unprotected anal sex	66 (57)	70 (60)	−0.686	0.495
Oral sex	57 (49)	58 (50)	−0.207	0.836
Kissing	41 (35)	19 (16)	3.956	0.001
Blood transfusion/receiving blood	58 (50)	71 (61)	−2.010	0.048
All	24 (21)	24 (21)	0.000	1.000
Don’t know	24 (21)	7 (6)	3.684	0.001
Consistent condom use intentions (next 3 months) with regular partners (always vs. not always)				
Male sex workers	1 (1–3)	3 (1–9)	−2.759	0.006
Females (street)	4 (1–10)	9 (1–10)	−2.227	0.026

	Pretest score (range)	Posttest score (range)	Wilcoxon signed-rank/Mann–Whitney test	*p*-value
Females (venue)	1 (1–1)	2 (1–5)	−2.796	0.005
Consistent condom use intentions (next 3 months) with casual partners (always vs. not always)				
Male sex workers	4 (1–10)	10 (5–10)	−2.765	0.006
Females (street)	10 (5–10)	10 (7–10)	0.038	0.970
Females (venue)	1 (1–9)	10 (1–10)	−2.434	0.015
Intention to HIV test (next 3 months)				
Male sex workers	6 (3–10)	8 (4–10)	−3.040	0.002
Females (street)	4 (1–7)	10 (2–10)	−2.343	0.019
Females (venue)	5 (1–10)	8 (6–10)	−2.996	0.003
Intention to receive HIV treatment (if tested HIV positive)				
Male sex workers	9 (5–10)	10 (4–10)	−1.149	0.250
Females (street)	10 (4–10)	10 (6–10)	0.576	0.565
Females (venue)	10 (10–10)	10 (10–10)	1.390	0.175

Medians were used, because knowledge had a skewed distribution