

and duration of stay in the area of the FSWs from the 3B districts working in the unit at the time of data collection.

Results In case of Bhivandi, Mumbai's Kamathipur and Poona, 571, 390 and 604 FSWs were from 3B districts respectively. There were 338 women working in Solapur. Of the 338 women, 127 were from Karnataka and all most all of them (114) from the 3B districts.

Conclusions Migration of FSWs from 3B districts is decreasing considerably to Maharashtra brothels. There is high turnover of FSWs from 3B districts in Solapur (100% per month), especially in lodges. This suggests that the proximity of Solapur to Bijapur (the main place of origin for FSWs in this place of destination) may be an important driver of the movement of FSWs. In other words, the difference in turnover between Solapur and the other places of destination may be indicative of two changes in the migration pattern: a) FSWs from the 3B districts may prefer closer destinations, rather than the "classic brothel based" destinations (eg, Mumbai, Pune, Bhiwandi due to declining clients); and b) FSWs from the 3B district who migrate to nearby destinations may prefer working in lodges rather than brothels, the "classic" place of sex work in Maharashtra where high prevalence of HIV/AIDS is observed. This is supported by mean ages of the FSWs (31.5, 28.3, 34.5 and 27.6) and mean durations of stay (10.5, 6.8, 11.9 and 4.0) in Bhiwandi, Pune, Mumbai and Solapur respectively.

P2-S2.09 PROFILE OF CLIENTS OF SEX WORKERS DEVELOPED THROUGH IMAGERY USED WITH FSWs IN SIX MAJOR PAKISTANI CITIES

doi:10.1136/sextrans-2011-050108.305

S S Abbas. *Margalla Clinic, Islamabad, Pakistan*

Background Negligible data on clients of FSWs is available in Pakistan. Severe punishments like stoning to death for sex outside marriage etc, has made clients unusually cautious and researchers have shied away in carrying out researches on the clients of sex workers. An innovative psychological method has helped obtain significant information about clients.

Methods FSWs were asked to recall details about each of their 10 most recent clients through imagery conducted/guided by qualified Clinical Psychologists retrained to work with FSWs. FSWs were steered to remember client's: age, profession, time spent with them, place of risk taking, use of drugs, use of condom, who provided it, resistance if any against the use of condom. 120 FSWs out of 2055 FSWs recruited during recent surveillance round in six big cities of the country (20 FSWs from each city) were randomly selected. Each imagery session lasted 90–120 min. Profile of 1200 Clients was prepared.

Results 56.4% were less than 30 years (youngest: 13 years; oldest 75 years). 67.62% were married. Petty shop keepers, labourers and students constituted 62.18% of the clients and 81.4% of them lived in the same city. 51.84% were regular clients. In 59% of cases FSWs provided their own place for risk taking. Alcohol/Drugs were used in 53.31% cases. 45% of the clients left within 30 min. 52% of the clients bought oral or anal sex for extra money. Condom was used in 57% of the cases but in 58.46% of the cases it was provided by clients themselves. FSWs kept it with them to facilitate the clients. 78% of clients were worried about pregnancies and only 18% of clients worry about STIs. FSWs seldom tried to persuade Clients to use condoms and the most effective way was stated to be the fear of pregnancy.

Conclusions Clients belong to the same city mostly regular, are inclined to use condom particularly to avoid pregnancy but could be educated to use it to avoid STIs. Client's population is definitely

receptive for the use of condoms. Making the FSWs keep a condom on herself is likely to increase the use of condoms.

P2-S2.10 SEX WORKER COLLECTIVE ORGANIZATION IN THE ABSENCE OF NGOS: A QUALITATIVE ANALYSIS OF FEMALE SEX WORKER HOMETOWN SOCIAL NETWORKS IN SOUTH CHINA

doi:10.1136/sextrans-2011-050108.306

¹J Tucker, ²H Peng, ³K Wang, ⁴H Chang, ²L G Yang, ²S Zhang, ²B Yang. ¹Massachusetts General Hospital, Boston, USA; ²Guangdong Provincial STI Control Center, China; ³Harvard Medical School, USA; ⁴University of Wisconsin Madison, USA

Background Reducing harm associated with selling and purchasing sex is an important public health priority in China, yet there are few examples of sustainable, successful programs to promote sexual health among female sex workers. Programs focusing on empowering sex workers using a rights-based framework have been effective in India and other regions, but have been challenging to replicate in China. The limited civil society and scope of nongovernmental organizations circumscribe the local capacity of female sex workers to collectively organise, advocate for their rights, and implement STI/HIV prevention programs. The purpose of this study was to examine social networks among low-income female sex workers in South China to determine their potential for sexual health promotion.

Methods Semi-structured interviews with 34 low-income female sex workers and 28 outreach members were used to examine how social relationships affected condom use and negotiation, STI/HIV testing and health-seeking behaviours, and dealing with violent clients.

Results These data showed that sex worker's hometown social connections were more powerful than relationships between women selling sex at the same venue in establishing the terms and risk of commercial sex. Female sex workers from the same hometown often migrated to the city with their hometown sisters and these social connections fulfilled many of the functions of non-governmental organizations, including collective mobilisation, condom promotion, violence mitigation, and promotion of health-seeking behaviours. Outreach members observed that sex workers accompanied by their hometown sisters were often more willing to accept STI/HIV testing and trust local sexual health services.

Conclusions Organising STI/HIV prevention services around an explicitly defined hometown social network may provide a strong foundation for sex worker health programs. Further research on dyadic interpersonal relationships between low-income female sex workers, group dynamics and norm establishment, and the social network characteristics are needed. Hometown social networks may represent a powerful force for organising STI/HIV prevention among low-income sex workers in China and other regions with limited civil society.

P2-S2.11 FOCUSED AND EARLY INTERVENTION IN RURAL AREAS CAN IMPACT ON HIV TRANSMISSION IN SOUTHERN INDIA

doi:10.1136/sextrans-2011-050108.307

R Washington, P Bhattacharjee. *KHPT, Bangalore, India*

Background A number of districts in Karnataka, south India have an equal prevalence of HIV in rural and urban areas. A link worker scheme focused on prevention interventions with rural female sex

workers, was implemented under the USAID supported Samastha project (2006–2011).

Methods A rapid rural mapping covering 7700 villages across eight districts helped map 16043 rural female sex workers clustered in about 1700 villages. Rural female sex workers (RFSW) were defined as women who lived and practiced sex work within the village. Peer educators supervised by outreach link workers identified, educated, directly provided condoms and mobilised RFSW to reach HIV services. STI and counselling and testing services were integrated into Primary Health Centres. An individualised web based management information system tracked outreach and services. Polling booth surveys were used to measure key behavioural outcomes.

Results By the fourth year of implementation, 14 697 (91.6%) of the estimated RFSW were reached. Monthly contact rates were sustained at 85%, with each RFSW directly receiving a mean of 28.3 condoms per month. Condom use rates rapidly increased to 63% at last sex with any partner and 78% with clients. 81% received STI services and more than 67% had been directly referred and received their HIV status. The proportion reporting with STI symptoms remained stable at around 60%; however, 64% of these were vaginal discharge. Genital ulcer rates decreased from 5.5 to 0.8% and other STI conditions from 6.1 to 1.7%. HIV prevalence among RFSW across districts ranged from 2 to 4%. Overall, HIV prevalence among antenatal women declined from 1.9 to 0.5% (2006–2009) in these districts.

Conclusions Focused and early interventions can reduce HIV transmission in rural areas and could be impacting even at the population level. It would be important to sustain focused prevention interventions in rural India.

P2-S2.12 CONDOM USE WITHIN INTIMATE PARTNERSHIPS OF FEMALE SEX WORKERS IN SOUTHERN INDIA

doi:10.1136/sextrans-2011-050108.308

¹K Deering, ²P Bhattacharjee, ²R Washington, ³J Bradley, ⁴M C Boily, ⁵S Shaw, ¹K Shannon, ²B M Ramesh, ²S Rajaram, ⁵S Moses, ³M Alary. ¹University of British Columbia, Vancouver, Canada; ²Karnataka Health Promotion Trust, Bangalore, India; ³Laval University, Canada; ⁴Imperial College, UK; ⁵University of Manitoba, Winnipeg, Canada

Background Although female sex workers (FSWs) report high levels of condom use with commercial sex clients, particularly after targeted HIV preventive interventions have been implemented, condom use is often low with intimate partners. There is limited understanding regarding the factors that influence condom use with FSWs' non-commercial intimate partners, and how programs can be designed to increase condom use. The main objectives of this study were therefore to describe FSWs' self-reported intimate partners, along with interpersonal factors characterising their intimate partnerships, and to examine factors associated with inconsistent condom use within intimate partnerships.

Methods This study used data collected from cross-sectional questionnaires administered to 988 FSWs in four districts in Karnataka state in 2006. We used bivariate and multivariable logistic regression analysis to examine the relationship between inconsistent condom use (ie, "never", "sometimes" or "frequently", compared to "always") with intimate partners of FSWs (including husbands/cohabiting partners and other non-paying partners) and interpersonal factors describing these partnerships. Weighting and survey methods were used to account for the cluster sampling design.

Results Overall, 511 (51.8%) FSWs reported having husbands/cohabiting partners and 273 (26.0%) reported having other non-paying partners. Inconsistent condom use with these partners was high (77.4% and 60.4% respectively). In multivariable analysis,

adjusting for social and environmental factors, the odds of inconsistent condom use with husbands/cohabiting partners and other non-paying partners were 12% (adjusted OR [AOR]: 1.12, 95% CIs 1.06 to 1.17) and 35% (AOR: 1.35, 95% CI 1.13 to 1.62) higher for a one-year increase in the duration of the relationship, respectively. The odds of inconsistent condom use with husbands/cohabiting partners was 50% lower if these partners knew that the respondent was a sex worker (AOR: 0.50, 95% CI 0.29 to 0.86). The odds of inconsistent condom use with other non-paying partners was 68% lower if the respondent reported ever having stayed or lived with these partners (AOR: 0.32, 95% CI 0.13 to 0.79).

Conclusions Improved designs for HIV preventive programs, including partner- or couples-focused programs, should be developed to address issues related to FSWs' intimate partnerships and increase condom use.

P2-S2.13 A PILOT STUDY OF THE EFFECTIVENESS OF A VAGINAL WASHING CESSATION INTERVENTION AMONG KENYAN FEMALE SEX WORKERS

doi:10.1136/sextrans-2011-050108.309

¹L Maseke, ¹R S McClelland, ²R Gitau, ¹G Wanje, ²J Shafi, ²F Kashonga, ²J Ndinya-Achola, ¹B Richardson, ³R Lester, ⁴A Kurth. ¹University of Washington, Seattle, USA; ²University of Nairobi, Kenya; ³University of British Columbia, Canada; ⁴New York University, USA

Background Intravaginal practices have been associated with HIV-1 acquisition. This may be mediated by mucosal disruption, changes in vaginal flora, or inflammatory responses in the genital tract. Reducing vaginal washing could lower women's risk of HIV-1 acquisition. We conducted a prospective study to test the hypothesis that a theory-based intervention would reduce vaginal washing in a cohort of high-risk Kenyan women. We collected pilot data on changes in biological markers that might help to explain the relationship between vaginal washing and HIV-1.

Methods HIV-1 seronegative women who reported current vaginal washing were recruited from a prospective cohort study of high-risk women in Mombasa, Kenya. A theoretical framework including Information Motivation and Behaviour and Harm Reduction was implemented to encourage participants to reduce or eliminate vaginal washing. At baseline and after 1 month, we evaluated vaginal epithelial lesions by colposcopy, vaginal flora by Nugent's criteria, and vaginal cytokine milieu using ELISA on cervicovaginal lavage specimens.

Results Twenty-three women were enrolled. The most commonly reported vaginal washing substance was soap and water (N=14, 60.9%). The median frequency of vaginal washing per week was 7 (IQR 0–14). After one week, 21 (91.3%) participants reported cessation of vaginal washing. After 1 month, all participants reported cessation of vaginal washing ($p \leq 0.001$ for comparison of baseline to follow-up prevalence). The average number of cervicovaginal epithelial lesions by colposcopy decreased after 1 month compared to baseline (Mean [SD] 0.4 [0.6] vs 0.2 [0.5]; coefficient -0.14 ; 95% CI -0.29 to 0.01 ; $p=0.08$). Although there was no change in the prevalence of BV (OR 1.00, 95% CI 0.42 to 2.38; $p=1.00$), these pilot data suggest that the likelihood of detecting *Lactobacillus* by culture might increase after cessation of vaginal washing (2 [8.8%] vs 6 [26.1%]; OR 3.71, 95% CI 0.73 to 18.76, $p=0.11$). Most cytokine levels were reduced after cessation of vaginal washing, but in this small, time-limited sample none of these changes were statistically significant.

Conclusions A theory-based intervention was highly successful in reducing vaginal washing over 1 month. This pilot study suggests the need for future studies with a larger sample size and longer follow-up to determine the effects of vaginal washing cessation on