existing client) (adjusted (AOR) 2.66, 95% CI 2.08 to 3.44), speaking a Mandarin or Cantonese language (AOR 3.01, 95% CI 1.67 to 5.42), inconsistent condom use for vaginal sex at work (AOR 12.54, 95% CI 7.32 to 21.48), and being older than 40 years (AOR 2.85, 95% CI 1.91 to 4.25). Thai language speakers were less likely to report inconsistent condom use for fellatio (AOR 0.44, 95% CI 0.23 to 0.83). No significant association was demonstrated for injection drug use or sexual practice outside of work. During the study period 17 of the 1539 sex workers (1.1%, 95% CI 0.6 to 1.8) were diagnosed with pharyngeal gonorrhoea.

Conclusions These finding suggest interventions to promote condoms for fellatio by sex workers are needed. We could not determine if inconsistent condom use for fellatio at work was directly associated with pharyngeal gonorrhoea due to the low sample size of cases. Further research into the determinants of this behaviour, particularly among different language groups is warranted.

P1-S2.20 FACTORS INFLUENCING CERVICAL INFECTION AMONG FEMALE SEX WORKERS IN BENIN

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Background As female sex workers (FSW) continue to play a key role in HIV-1 epidemic in sub-Saharan Africa, programs aiming at reducing sexually transmitted infections (STI) involved in HIV acquisition and transmission are still needed. The objective of this study was to determine factors influencing STI acquisition among FSW in Cotonou, Benin.

Methods Three hundred and eighty seven (387) FSW were recruited in a medical center dedicated to STI treatment among female sex workers and their clients. Cervical infections by *Neisseria gonorrhoeae* (NG) and *Chlamydia trachomatis* (CT; SDA, BD Probe Tec®) were investigated at enrolment into the study. All infected FSW received adequate treatment for free. We used a multivariate logistic regression model to assess variables independently associated with cervical infection at enrolment (p value<0.05).

Results The FSW were essentially from Benin (39.5%) and neighbouring countries such as Nigeria (22.1%), Togo (21.8%) and Ghana (15.1%). One hundred and forty three subjects (143; 37.0%) were HIV-1 positive (52 were treated with antiretroviral therapy and 91 remained untreated because not yet meeting eligibility for treatment). Median age (IQR) and median duration (IQR) in the work were 33 (27—40) and 3 (1.2—5) years. Cervical infections by NG and CT were diagnosed in 4.4% and 3.9% cases, respectively. Only two women (0.5%) had both infections. Seventy seven per cent (77.1%) and 86.8% of the FSW reported, respectively, consistent condom use during the last 7 days of work and condom use at last sexual intercourse with a client. After adjustment for age and condom use, being HIV-1 infected [RR 3.04; 95% CI 1.25—to 7.40], not working in a brothel (RR 3.28; 95% CI 1.64—to 9.27), and being working for less than 12 months (RR 3.55; 95% CI 1.53—to 8.23) were independently associated with cervical infection in our study population.

Conclusion Our results suggest that HIV-1 infection and cervical infection by NG and CT alter each other. Antiretroviral therapy in association with preventive programmes aiming at controlling STI should be encouraged among new FSW and also among those working outside brothels.

P1-S2.21 INTEGRATING PUBLIC HEALTH INTO THE SEX WORKER COMMUNITY IN INDIANAPOLIS

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Background Syphilis is a significant disease from a public health perspective both historically and as a result of the serious consequences of infection. While studies have explored the epidemiology of syphilis among at-risk populations, limited information exists regarding women's preferences for STD testing and treatment services. The purpose of this study was to explore sex workers preferences for receiving sexual health services.

Methods A total of six groups of 4—7 sex workers each were recruited from local community-based organisations. The semi-structured interview guide included questions based on the Health Belief Model such as—1) cues to action—"Think back to the last time you received a female wellness exam or got tested for STD. What prompted you to schedule that appointment?" 2) Perceived susceptibility—"Describe what worries you most when you think about your health and how it's affected by being on the streets." and 3) perceived barriers—"What are some of the reasons why women who are working the streets don't get tested for STD?" Focus groups lasted 1 h, were audio recorded, and transcribed. Preliminary codes were selected, applied to the transcripts, and key concepts that spanned groups were identified.

Results In general, most women used utilised health protective behaviours to mitigate health risks associated with sex work. However, these behaviours were context and partner specific. Participants were interested in having increased access to sexual health services. Primary themes regarding program development included—experiences with healthcare providers, types of services that would encourage uptake, mechanisms for service delivery and the importance of collaborating with law enforcement and other service providers. The participant's recommendations were organised into a model program with specific service delivery mechanisms for each key concept.

Conclusions These data suggest potential pathways STD control programs to intervene with hard-to-reach populations, like commercial sex workers. In this project, a participant-informed approach was utilised that should result in increased uptake and utilisation of sexual health services because participants provided key insights into the programmatic considerations necessary for STD prevention efforts to be most effective.

P1-S2.22 CHANGES IN HIV KNOWLEDGE & RISK BEHAVIOURS IN FEMALE SEX WORKERS IN RWANDA - HIV PREVENTION IMPLICATIONS OF TREND ANALYSES IN BEHAVIOURAL SURVEILLANCE

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In Rwanda, existing empirical and analytical studies indicate that female commercial sex workers (FCSW) play an important role in the HIV epidemic. It is thus critical to track sexual risk behaviours in this group in order to develop effective prevention programs and services for sex workers. In this context, the Ministry of Health (MOH) of Rwanda and partners conducted two rounds of behavioural surveillance surveys (BSS) among FCSW in 2006 and 2010. We used time-location sampling based on geographic maps of sex work