infections at UCLA Health. We found that use of the assay was associated with a significant decrease in ceftriaxone use, significant increase in ciprofloxacin use and in a small group of ciprofloxacin-treated cases (N=25), 100% cure. Additional clinical trials are underway. Similar molecular assays to predict ciprofloxacin susceptibility in gonorrhea have been approved for marketing in Europe and Australia. Commercial *Neisseria gonorrhoeae* GyrA testing is also available in the United States.

S05 – COMMUNITY ENGAGEMENT, MOBILIZATION AND EMPOWERMENT

Monday, July 15, 2019 4:15 PM – 5:45 PM

S05.1 WORKING WITH COMMUNITY TO CONTROL HIV/STI: A U.S. LOCAL HEALTH DEPARTMENT PERSPECTIVE

Matthew Golden*. *University of Washington, Seattle, USA*

10.1136/sextrans-2019-sti.32

Community partners play a central role in planning and implementing HIV/STD control programs in the United States. Because the health care system in the United States is highly decentralized and fragmented, from a local health department perspective, community partners have to be broadly defined to include not only the populations affected by HIV/STD and organizations that represent those populations, but also health care providers and health care organizations. Health departments often have to balance roles that involve collaboration and shared decision-making with roles as funders who monitor contracts and the performance of funded community-based organizations. This presentation will describe how health departments and community collaborators work together in the U.S., examples of how these collaborations have been successful, and some of the challenges local health departments face as they work with diverse community stakeholders to prevent and treat HIV/STD.

S05.2 MOBILISING FOR HEALTH AND RIGHTS: A HISTORY OF SEX WORKER ACTIVISM IN INDIA

Smarajit Jana*. *Sonagachi Research and Training Institute, Kolkata, India*

10.1136/sextrans-2019-sti.33

The implementers of a peer-based HIV prevention program among brothel based female sex workers in Kolkata, India soon realized [1993] that sex workers' inability to enforce safer sex is linked to her social and legal position. To address sex workers' vulnerability they adopted a strategy to empower sex workers at individual, community and at societal level. The 'collective bargaining power' of the sex worker could tilt the power balance with other stakeholders including their clients thereby ensuring safer sex as a norm which brings success in prevention program. Condom use rate gone up from 3% to 95% and RPR sero positivity was brought down from 25% to below one% within three years of time. The implementers of a peer based HIV prevention program among brothel based female sex workers in Kolkata, India soon realized [1993] that sex workers' inability to enforce safer sex is linked to

her social and legal position. To address sex workers' vulnerability they adopted a strategy to empower sex workers at individual, community and at societal level. The 'collective bargaining power' of the sex worker could tilt the power balance with other stakeholders including their clients thereby ensuring safer sex as a norm which brings success in prevention program. Condom use rate gone up from 3% to 95% and RPR sero positivity was brought down from 25% to below one% within three years of time. National AIDS control organization of India took the lessons and incorporated collectivization and capacity building of the sex workers as an integral and budgeted component of HIV intervention program. Major donors like BMGF, DFID followed the suit. The policy did help sex workers' community to regain dignity and confidence and build their collectives in different parts of the country who later took over the management of HIV intervention program. Development of sex workers' Union at the National level further strengthened their demand to get recognized as a service sector worker who posits STIs and HIV as occupational disease. The union expanded program including other development activities like education for their children, building their financial co-operative, and program to stop violence and trafficking. The Indian National program made success in adopting community led interventions. HIV prevalence among sex workers in major cities came down from 50% to 70% [in 1995] to 3.5% [in 2014] in addition to producing social goods. Collectivization and ownership of the affected community over the process and product of health interventions is critical to success.

Disclosure No significant relationships.

S05.3 MOBILIZATION AND EMPOWERMENT OF SEX WORKERS: CAN SELF-HELP GROUPS BRING ABOUT SUSTAINED CHANGE?

Primrose Matambanadzo*. *CSHHAR Zimbabwe, Key Populations, Harare, Zimbabwe*

10.1136/sextrans-2019-sti.34

Description of the problem

Female sex workers (FSW) in southern Africa bear the brunt of the HIV epidemic. In Zimbabwe HIV prevalence among FSW is 55%. They have high rates of sexually transmitted infections and face societal stigma and violence related to their work. Research evidence suggests that interventions to mobilise and empower FSW can mitigate their risks of HIV and STI incidence and violence by building social cohesion as well as strengthening engagement with services, critical if programme coverage is to be optimised and UNAIDS targets are to be reached.

Study objectives To explore the impact of microplanning and self-help groups among female sex workers on uptake of and engagement with HIV, SRH and other health services, confidence and self-efficacy, financial literacy and security and psychological resilience.

Methods The Sisters programme in Zimbabwe provides nationally scaled services for female sex workers. We piloted an intervention to build resilience and social cohesion of sex workers and strengthen their link to clinical services using self-help groups and microplanning (data guided, peer-led, risk differentiated outreach).

Results Self-help groups were feasible to run and acceptable to FSW although in some sex work hotspots took time and more

intensive support to fully establish. FSW engaged in self-help groups and supported each other by arranging child care, encouraging each other to go to get clinical care, establish savings and lending schemes and in some cases to return to educational or vocational training.

Conclusion Sex workers were empowered and able to make better life decisions. Priorities for the groups changed over time and as trust increased. Self-help-groups can become autonomous of programme support over time. Microplanning allowed us to regularly reach women not previously engaged in the programme. We plan to test the cost effectiveness of this intervention in a cluster randomised trial.

Disclosure No significant relationships.

S05.4 #SAVESEXY: A GAMIFIED APPROACH TO HARNESSING THE POWER OF COMMUNITY ACTIVISM FOR HIV TESTING PROMOTION

Benedict Bernabe*. *The Red Whistle, Makati, Philippines*

10.1136/sextrans-2019-sti.35

As a response to the rising trend of new HIV infections among men who have sex with men (MSM), a group of volunteers in Manila, Philippines, formed a nonprofit organization called The Red Whistle (TRW). MSM in the Philippines suffer not just from HIV-related stigma but also from gender-based discrimination. In order to circumvent this environment, TRW devised '#SaveSexy' a gamified approach to HIV awareness communication and HIV testing promotion that is not explicitly targeted to MSM but used visual imagery and messaging that would attract an MSM crowd. Using well-designed merchandise and branding, celebrity volunteers, and themed activities, '#SaveSexy' encouraged its target audience to rethink the concept of 'sexy' as being confidently aware of their sexual health. The campaign takes its cue from market research done by TRW and partner ad agencies on what works for its target audience and applies this research to sexual health promotion. In this format, TRW partners with local government units and community-based organizations to organize 'races' where three teams of volunteers compete to encourage the most number of individuals to get tested in a single day. Elements of the strategy include teaming up with a celebrity volunteer and using social media to boost the reach and engagement of the information drive online. It also includes partnering with the local government's health office who will provide volunteers and materials for HIV testing. Aside from being well received, the intervention is also cost-effective. Designed to cost at around Php 250,000 (USD 5,000) per event targeting 350 individuals tested, the average cost per is Php 715 (USD 14) per individual tested. In February 2019, it reached the most number of individuals tested in one day at 1,006, also for the lowest amount invested at Php 170,000 or USD 3,400. Average cost per individual tested was Php 169 (USD 3.38).

Disclosure No significant relationships.

S06 – IMPROVED MODELS AND TOOLS FOR STI INFECTIONS

Monday, July 15, 2019 4:15 PM – 5:45 PM

S06.1 USE OF CERVICAL EXPLANTS TO STUDY GONOCOCCAL PATHOGENESIS

Daniel Stein*. *University of Maryland, Cell Biology and Molecular Genetics, College Park, USA*

10.1136/sextrans-2019-sti.36

Gonococcal infections remain a challenging public health issue due, in part, to a lack of a vaccine. A major obstacle in vaccine development and for understanding gonococcal infections in women is the lack of tractable models mimicking *in vivo* infection in the female reproductive tract. We used human tissue-explants and isogenic gonococci (GC) to examine by quantitative imaging analysis the impact of the heterogeneity of cervical and bacterial surfaces on infection. We found that GC preferentially colonize the ectocervix and squamocolumnar junction (transformation-zone, TZ) but only penetrate into TZ and endocervical epithelia. Colonization of any region required the expression of pili. GC expressing Opacity-associated proteins (Opas) that bind the host carcinoembryonic antigen-related cell adhesion molecule (CEACAMs) (Opa_{CEA}) increase ecto/endocervical colonization and reduce endocervical penetration. GC expressing Opas that bind heparan sulfate proteoglycans (HSPGs) (Opa_{HSPG}) did not promote colonization or tissue penetration in any region of the cervix. Opa_{CEA} inhibited GC-induced disruption of epithelial-epithelial adhesions and epithelial exfoliation, enhancing GC colonization and reducing penetration, through engaging CEACAMs. We propose the following model to explain GC pathogenesis of the female reproductive tract (FRT). GC establish colonization through pili-mediated adhesion. Opa_{CEA} expression promotes colonization, leading to asymptomatic local infections. Low expression of Opa_{CEA} allows GC to effectively penetrate into the endocervical epithelium, causing symptomatic infection. Because GC with low levels of Opa_{CEA} expression are rare, as most 11 Opa proteins are Opa_{CEA}, this model provides an explanation as to why most infections of the FRT are asymptomatic and why invasive disease is rare.

Disclosure No significant relationships.

S06.2 T. PALLIDUM IN VITRO GROWTH

Steven J Norris*. *McGovern Medical School at UTHealth, Pathology and Laboratory Medicine, Houston, USA*

10.1136/sextrans-2019-sti.37

For over a century, investigation of *Treponema pallidum* subsp. *pallidum*, the spiral-shaped bacterium that causes syphilis, was hindered by an inability to culture the organism in vitro. Recently, we reported long-term cultivation of this enigmatic