

S04 – THE IMPACT OF ADVANCES IN DIAGNOSTIC TECHNOLOGY ON POLICY, PROGRAM AND PRACTICE (ISSTD SPECIAL SYMPOSIUM)

Monday, July 15, 2019
10:45 AM – 12:15 PM

S04.1 RESISTANCE-GUIDED THERAPY FOR *M. GENITALIUM*: IMPACT OF DIAGNOSTIC RESISTANCE ASSAYS ON PRACTICE AND POLICY

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Mycoplasma genitalium (MG) has developed resistance to macrolides that currently exceeds 50% in most nations and quinolone-resistance, particularly in the Western Pacific region is increasingly being reported. Widespread use of azithromycin in the management of STI syndromes, chlamydia and gonorrhoea has contributed to the emergence and spread of macrolide-resistant MG globally. Diagnostic assays that incorporate macrolide resistance markers have recently been developed and provide an opportunity to reduce the use of azithromycin and individualise therapy. This talk will focus on the impact of the first generation of diagnostic resistance assays for MG on microbial cure and de novo resistance. It will review their utility in clinical algorithms in an STI setting and their impact on practice and policy. Macrolide resistance mutations are well described and result in high level resistance and failure of azithromycin making them highly suitable candidates for resistance assays. However markers of quinolone resistance, needed for the development of the next generation of resistance assays, have been harder to define and correlate with treatment outcomes.

Disclosure No significant relationships.

S04.2 POINT OF CARE AND HOME TESTING OPPORTUNITIES: IMPLICATIONS FOR QUALITY PUBLIC HEALTH PRACTICE

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Chlamydia (CT) and gonorrhea (GC) are the two most commonly reported notifiable diseases in the United States and case reports have been increasing in recent years. New technology may soon allow individuals to test themselves for CT and GC, either at home, or in a clinic or physician's office. This presents both challenges and opportunities for public health practice. This presentation will cover a range of implications of point of care and home testing, including for testing, for treatment of index patients and partners, for surveillance, and for reaching priority populations. Data on acceptability of such tests among priority populations, including men who have sex with men and young adults, as well as among physicians from a variety of disciplines, will also be presented.

Disclosure No significant relationships.

S04.3 HOME BASED TESTING: UNINTENDED CONSEQUENCES AND IMPLICATIONS FOR ANTIMICROBIAL STEWARDSHIP – SHOULD WE BE CONCERNED?

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10.1136/sextrans-2019-sti.30

The ability to increase access to STI and HIV diagnoses and treatment through home testing has been demonstrated to be both acceptable and popular and should herald a bright future. But the lack of appropriate regulation and the financial imperative for commercial organisations of profitability is having a number of unintended consequences. 1) How is the data being shared with public health, which produces population STI and HIV statistics? Failure to integrate all sources will result in an incomplete picture affecting public health priorities. 2) In the United Kingdom a number of on-line providers are offering premium multi-plex testing and in some cases individual NAAT testing for *Ureaplasma urealyticum*, *Mycoplasma hominis*, *Mycoplasma genitalium* and *Gardnerella vaginosis* for which there is a) no evidence that detecting and treating them in asymptomatic individuals does more good than harm and/or b) no association with disease at low load. Companies may refer patients to Wikipedia for information or develop their own with misleading statements such as 'If Ureaplasma infection is left untreated, there is an increased risk of getting other STIs, including HIV... In women there is also an increased likelihood of infertility if there is a prolonged Ureaplasma infection.' This results in over-diagnosis, unnecessary patient anxiety and inappropriate antimicrobial therapy increasing the risk of antimicrobial resistance to tetracycline, macrolides and metronidazole. 3) The performance of these multi-plex assays is also unclear. Which is of relevance in the diagnosis and treatment of chlamydia, gonorrhoea, trichomonas and *M. genitalium* which has implications for patients and public health STI control programmes. Should we be concerned and if so what needs to be done? We need regulation fit for purpose with mandatory sharing of anonymised data and governance from national/international expert bodies on STIs and HIV – but who will take ownership of this and fund it?

Disclosure No significant relationships.

S04.4 IMPLEMENTING MOLECULAR TESTING TO PREDICT *NEISSERIA GONORRHOEAE* SUSCEPTIBILITY IN CLINICAL PRACTICE

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Neisseria gonorrhoeae is the second most common reported sexually transmitted infection in the United States. Globally there have been increasing reports of antimicrobial resistant infections. In order to reduce the direct selection pressure of a single treatment regimen on *Neisseria gonorrhoeae*, it might be beneficial to use different treatments. Recent advances in molecular biology allow for the prediction of antimicrobial susceptibility in bacteria based on short DNA sequence patterns in certain genes associated with resistance. In 2015, we introduced the routine use of a molecular GyrA assay to predict ciprofloxacin susceptibility in *Neisseria gonorrhoeae*.

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

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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

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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?

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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