

Chlamydia trachomatis is an important human pathogen, responsible for diseases ranging from trachoma to sexually transmitted infections that cause substantial morbidity in developed as well as developing countries. In the UK alone Chlamydia is estimated to cost the National Health System up to 100 million pounds every year (www.chlamydia-screening.nhs.uk). OmpA genotyping is the most widely used typing scheme for Chlamydia with the ocular genotypes represented by A to C, urogenital genotypes D to K and for LGV its L1-L3. Studies from all over the world show that the most common urogenital genotypes are E, F and D. This has led to the pervasive view that during the last few decades, the overall distributions urogenital of *C. trachomatis* genovars throughout the world has been relatively stable. Moreover, there are a large number of epidemiological studies that have used ompA-type as a marker to infer relatedness between isolates and compare disease presentations between genotypes. Looking across them all there is almost an equal number of epidemiological studies that have shown an association between genotype and the hosts: age, gender, number of sexual partners, or clinical symptoms, compared to the number of studies that have not.

However, recently whole genome sequence has challenged much of our evidence, hypothesis, views and preconceptions about many bacterial pathogens, but especially Chlamydia. We now have accurate phylogenies that reveal how the different 'types' of *C. trachomatis* actually relate to each other showing us the typing protocols based on a single region or small number of genomic loci that we have been using should be treated with caution. Why? Because *C. trachomatis* has been shown to be a highly dynamic bacterium exchanging huge portions of its DNA with members of its own species regardless of what body site we think those isolates are restricted to or have a tropism for. This may not only explain why there is such a disparity in studies looking for correlations between ompA-genotype and disease presentation but also shows us that there are in fact still real opportunities to discover features of the basic biology of this fascinating bacterium. But perhaps more than this, through a combination of the ever-increasing burden of disease, recent advances in technology and molecular tools for chlamydial research, it shows us that there has never been a better time to be a Chlamydiologist.

Plenary Session PL02

Monday 14 September 2015

3.45pm – 5.15pm

PL02.1 FALLING BETWEEN THE GAPS: AN OVERVIEW OF ISSUES FOR ABORIGINAL AND TORRES STRAIT ISLANDER WOMEN WHO WANT TO BE SEXUALLY HEALTHY

Kery Arabena. *Indigenous Health Equity Unit, Centre for Health Equity, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia*

10.1136/sextrans-2015-052270.5

The family life of Aboriginal and Torres Strait Islander people is predominantly structured around complex kinship systems, which locate each person within a clan structure, with clear lines of rights and obligations to others within the family, the clan

and ultimately the linguistic group. Children are highly valued by their families and clans. Until the recent past the education and socialisation of young children took place within the rhythms of family life with an emphasis on observation, imitation and interaction with extended family and their country. These ideals of family life have been radically disrupted for some families, particularly those that have suffered separation of children from their families, the destruction of extended family networks and the decades' worth of living in oppressive circumstances, evidenced by poor health, early deaths, poor housing, poor educational outcomes, high unemployment and high numbers of Aboriginal people in custody. Despite these hardships, the Aboriginal and Torres Strait Islander family remains the primary and preferred site for developing and protecting culture and identity. In this context, sexual and reproductive health should be highly valued by Aboriginal and Torres Strait Islander women and health service settings that set priorities, specify outcomes, design appropriate services, allocate resources and evaluate the effectiveness and efficiency of the services delivered. In the absence of a coordinated national sexual health or Aboriginal and Torres Strait Islander women's health strategy; the most vulnerable and marginalised community in Australian society is falling through the gaps in sexual and reproductive health, rather than closing the gap. This presentation will present issues for First Nations women in Australia and reflect on what we need to do to improve sexual health and wellbeing.

PL02.2 REPRODUCTIVE TRACT INFECTIONS IN WOMEN

Scott McClelland. *Professor of Allergy and Infectious Diseases, School of Medicine, University of Washington, Seattle, USA*

10.1136/sextrans-2015-052270.6

Numerous prospective studies have demonstrated that bacterial vaginosis (BV) is associated with increased risk for acquiring sexually transmitted infections (STIs) including *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Trichomonas vaginalis*, HSV-2, HPV, and HIV. Because unprotected sex is a risk factor for both BV and other genital tract infections, it has been difficult to determine whether BV mediates susceptibility to STIs. This presentation will examine the strength of the evidence, emphasising recent clinical trials and epidemiological studies. Additionally, we will explore advances in our understanding of mechanisms through which BV-associated bacteria could influence women's susceptibility to other genital tract infections. Possible approaches for testing the hypothesis that BV increases the risk of STIs will be considered.

PL02.3 SYPHILIS ELIMINATION IN CHINA

Yang Bin. *Dean of Guangdong Provincial Dermatology Hospital/Director of Guangdong Provincial Centers for Skin Diseases and STI Control, and Professor, Jinan University, Guangdong Medical College, and Anhui Medical University, China*

10.1136/sextrans-2015-052270.7

This presentation is mainly about the history, present situation and challenges of syphilis prevention and control in China. With the trend of syphilis prevalence in Guangdong province and the challenges, we discuss the important role and the impact of the control of syphilis in Guangdong province to the whole country,