These results show extreme vulnerability of HIV-positive women, which has increased the common obstetric risks of gestational process, the immune compromised. Policies directed to the health needs of HIV-positive women become crucial to prevent maternal-to-child transmission of HIV and other STIs.

Disclosure of interest statement The authors report no real or perceived vested interests that relate to this article that could be construed as a conflict of interest.

P16.09 COINFECTION WITH GONORRHOEA, SYPHILIS OR BOTH DOES NOT APPEAR TO AFFECT HIV TRANSMISSION TO THE SEXUAL CONTACTS OF HIV+ PATIENTS WITH UNDETECTABLE VIRAL LOADS

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Background Infection with gonorrhoea (GC) or syphilis is postulated to increase the transmission of HIV 2–5 times; however, studies were done before highly effective HIV therapy was available. In Philadelphia, partner services (PS) is performed, regardless of viral load (VL), for HIV+ patients who are newly diagnosed, STI coinfecting, or who are reported as contacts to a patient with new STI or HIV. We hypothesised that STI coinfection would not affect HIV transmission among partners of patients with undetectable VL receiving PS.

Methods HIV+ Philadelphia residents receiving PS from January 2012–December 2014 with a VL within +/- 6 months of PS interview date, with or without STI within +/- 90 days of PS, were included. Partners not already known to be HIV+ who tested for HIV as part of PS were categorised into contacts of either 1) HIV+ patient, undetectable VL (<50 c/ml) or 2) HIV+ patient, detectable/unknown VL.

Results PS encounters were initiated 2,463 times; 80.9% of encounters resulted in interview and 2,106 partners were elicited. Of the 1,211 locatable partners not known to be HIV+, 668 (55.1%) were tested after PS. New HIV was diagnosed more often among partners of patients with detectable/unknown VL (57/435, 13.1%) versus those with undetectable VL (17/233, 7.3%) (OR = 1.9, 95% CI 1.1–3.5). When patient VL was undetectable, there was little difference in HIV diagnoses among partners of patients with no STI (8/89, 9.0%), syphilis (7/90, 7.7%), GC (2/49, 4.1%), or syphilis/GC (0/5).

Conclusion Patients with undetectable VL who were coinfecting with GC, syphilis or both did not transmit HIV to their named sexual contacts at a higher rate than those with HIV alone. Molecular sequencing data can add insight into actual transmission between partners. HIV/STI PS programs could consider deprioritizing the provision of PS to patients with undetectable VL regardless of STI coinfection.

Disclosure of interest None of the authors have any conflicts of interest to disclose.

P16.10 WORSE EPIDEMIC OF EARLY HIV INFECTION AMONG MEN WHO HAVE SEX WITH MEN IN CHINA: IMPLICATION FOR REAL TIME ACTION

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Background Recent upsurge of new HIV infections among men who have sex with men (MSM) is a major concern in China. Paucity of national-level information regarding the burden and predictors of this progressive epidemic of new infections called for a multi-centric, timely and comprehensive investigation.

Methods Mixed methods were used to recruit MSM (MSM) from seven cities in China between 2012 and 2013. Early and established HIV infections were estimated by Western Blot and BED HIV-1 capture enzyme immunoassay. Syphilis and herpes simplex virus-2 (HSV-2) were also tested.

Results A total of 4496 eligible MSM were recruited. The majority was aged ≤35 years (77.5%), migrants (60.3%), never married (69.8%), and played receptive role in anal sex (70.5%). The HIV prevalence was 9.9%, and 41.9% were recently infected, with HIV incidence of 8.9/100 Person-Years (95% CI: 7.6–10.2). The prevalence of history HSV-2 and syphilis were 12.5% and 8.5%, respectively. Early HIV infection was associated with having multiple male partners (aOR = 1.4, 95% CI 1.1–1.9), recreational drug use (aOR = 2.2, 95% CI 1.6–3.0), anal bleeding (aOR = 2.1, 95% CI 1.4–3.0), circumcision experience (aOR = 2.0, 95% CI 1.3–3.1), syphilis infection (aOR = 2.8, 95% CI 1.9–4.3) and history HSV-2 infection (aOR = 2.3, 95% CI 1.5–3.3).

Conclusion High rate of early HIV infection is potentially resulting in progressive deterioration of the overall HIV epidemic among MSM in China. Targeted interventions to address high-risk MSM including those having multiple partners, history of recreational drug use and syphilis or HSV-2 infection seemed to be the need of the hour.

P16.11 ESTIMATING THE DISTRIBUTION OF NEW HIV INFECTIONS BY KEY DETERMINANTS IN GENERALISED EPIDEMICS OF SUB-SAHARAN AFRICA USING A VALIDATED MATHEMATICAL MODEL

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