Methods An observational, comparative study was conducted at the Clinic of Lower Genital Tract Diseases and Colposcopy, between January 2011 and January 2012. We included 75 patients who had genital lesions induced by HPV, already submitted to the respective treatments: 29 women with genital warts and 46 with cervical intraepithelial neoplasia with high histological grade (CIN 2/3). The patient’s medical records were evaluated regarding the type of HPV infection-induced, as well as therapy. Patients included were initially asked about the epidemiological data, medical history, gynaecological, obstetric and sexual behaviours. Also, the impact of socioeconomic and sex-related disease and its treatment was recorded. After this initial interview, the SF-36v2 and Quotient sex - female version (QS-F) was applied. Both women with genital warts as those with CIN 2/3 showed a reduction in their quality of life.

Results The results after evaluation of the SF-36 showed that patients with CIN 2/3 have the same score in the physical domain (p=0.246), pain (p=0.677), general health (p=0.109) and physical component (p=0.087) compared to patients with genital warts. However, patients with warts have statistically lower scores compared to patients with CIN 2/3 regarding the mental component (p=0.003), physical functioning (p<0.001), vitality (p=0.003), Social (p=0.027), emotional (p=0.031), mental health (p<0.001) domains.

Conclusion In relation to the sexual aspect it is important to say that patients with CIN 2/3 have statistically the same classification of sex ratio when compared to patients with genital warts (p=0.115). However, when performing specific questions about sexual parameters, warts caused a greater impact on sexual life of patients.

Abstracts

P3.166 HIGH CHLAMYDIA AND BACTERIAL VAGINOSIS BURDEN IN HIV EPICENTRE IN SOUTH AFRICA

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Introduction As long as syndromic management of sexually transmitted infections (STI) remains the main model of care in low and middle income countries, diagnostic surveillance is essential for STI control, especially in high HIV incidence settings. Here, we present the baseline data from the CAPRISA 083 cohort study that was conducted in a large urban primary health care clinic in KwaZulu-Natal, South Africa.

Methods Women aged 18–40 presenting for syndromic STI care at the facility were assessed for participation. HIV positive women (prevalence 39.1%), pregnant women (9.1%) or those engaging in sex work were excluded due to pre-determined eligibility criteria. Women consenting to the study completed a sexual risk questionnaire, were examined by a nurse, and underwent point-of-care testing for chlamydia and gonorrhoea (Xpert CT/NG), trichomonas (OSOM rapid test), and microscopy to assess for bacterial vaginosis (BV) and candida.

Results A total of 267 women, median age 23 (IQR 21–27), were enrolled and 88.4% reported to be symptomatic. All were sexually active and 75.7% stated that they used condoms with their partners, although only 3.7% used them consistently. 125 (46.8%) had abnormal pelvic examinations, including 106 (39.7%) women with vaginal discharge. STI testing revealed an 18.5% prevalence of chlamydia (20.5% in <25 year-olds), 5.2% gonorrhoea and 2.6% trichomonas. Two thirds of women (69.3%) had evidence of abnormal vaginal flora (33.7% BV and 35.6% intermediate flora) based on Nugent Score, and 17.6% were diagnosed with candida infection. A total of 52/267 (19.5%) reported symptoms, but had no STI or abnormal flora found. Of 9 specimen cultured for gonorrhoea resistance, 7 (77.7%) were resistant to penicillin and 4 (44.4%) to ciprofloxacin, but no cephalosporin resistance was identified.

Conclusion In this high HIV incidence setting, the burden of chlamydia infection and abnormal vaginal flora was concernedly high, warranting enhanced STI management strategies at population level.

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Abstracts

EVALUATION OF THE POINT-OF-CARE XPERT® CT/NG AND OSOM® TRICHOMONAS RAPID TESTS AGAINST THE ANYPLEX™ II STI-7 DETECTION ASSAY

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Introduction Syndromic management of sexually transmitted infections (STIs), as practised in most poorly resourced countries misses out asymptomatic infections. Affordable nucleic acid amplification tests (NAATs) are needed for accurate STI diagnosis and treatment.

Methods As part of a cohort study assessing a diagnostic STI care model among young South African women presenting for syndromic care, we evaluated the clinic-based point-of-care (POC) tests Xpert CT/NG and OSOM Trichomonas Rapid Test against the laboratory-based Anyplex II STI-7, a multiplex real-time PCR assay which detects Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG), Trichomonas vaginalis (TV), M. genitalium (MG), M. hominis (MH), U. urealyticum (UU) and U. parvum (UP) in a single reaction. All positive and discordant results were confirmed with a third molecular assay, the FTD STD9.

Results Vaginal swabs taken from 247 women were assessed in parallel. 238 of 247 (96.4%) results were in agreement comparing Xpert and Anyplex. All nine discrepant results were positive for CT on Xpert but negative on Anyplex. FTD STD9 confirmed three positive and six negative results. The sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of XPert for CT against the two assays was 100%, 97.1%, 96.0%, 100%, respectively; and for NG 100%, 99.6%, 92.3%, 100%. The sensitivity, specificity, PPV and NPV of OSOM for TV against the two assays was 77.8%, 100%, 100%, 99.2%. In addition to the CT, NG and TV detection, the Anyplex identified a prevalence of 4.8% MG, 33.5% MH, 19.1% UU and 51.4% UP in this population.

Conclusion The overall performance of Xpert CT/NG against laboratory-based assays was comparable. A lower PPV may lead to some overtreatment, however, in a high burden STI and HIV region, where STIs are often asymptomatic, the high sensitivity and specificity are reassuring. The widened spectrum of Anyplex targets highlights the high burden of Ureaplasma and Mycoplasma species in this setting, whose clinical significance need further exploration.

HUMAN LEUKOCYTE ANTIGEN (HLA) B*18 AND PROTECTION AGAINST MOTHER-TO-CHILD HIV TYPE1 TRANSMISSION

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Introduction Human leukocyte antigen (HLA) molecules regulate the cellular immune system and may be determinants of infant susceptibility to human immunodeficiency virus type 1 (HIV-1) infection. Molecular HLA typing for class I alleles was performed on infants followed in a Kenyan perinatal cohort.

Methods Early HIV-1 infection status was defined as infection occurring at birth or month 1, while late infection via breast milk was defined as first detection of HIV-1 after 1 month of age. Likelihood ratio tests based on a proportional hazards model adjusting for maternal CD4 T cell count and HIV-1 viral load at 32 weeks of gestation were used to test associations between infant allelic variation and incident HIV-1 infection. Among 433 infants, 76 (18%) were HIV-1 infected during 12 months of follow-up.

Results HLA B*18 was associated with a significantly lower risk of early HIV-1 transmission [relative risk (RR)=0.26; 95% confidence interval (CI) 0.04–0.82], and none of the 24 breastfeeding infants expressing HLA B*18 who were uninfected at month 1 acquired HIV-1 late via breast milk. We observed a trend toward increased early HIV-1 acquisition for infants presenting HLA A*29 (RR=2.0; 95% CI 1.0–3.8) and increased late HIV-1 acquisition via breast milk for both Cw*07 and Cw*08 (RR=4.0; 95% CI 1.0–17.8 and RR=7.2; 95% CI 1.2–37.3, respectively).

Conclusion HLA B*18 may protect breastfeeding infants against both early and late HIV-1 acquisition, a finding that could have implications for the design and monitoring of HIV-1 vaccines targeting cellular immune responses against HIV-1.

WOMEN, HARM REDUCTION AND HIV

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Introduction This paper compares and contrasts number of partners and condom use behaviour for female sex workers and a sample of women working in other economic activities, with both samples drawn from the large informal settlement of Kibera, Nairobi.

Methods As expected, univariate analysis revealed much higher numbers of overall sexual partners and higher levels of condom use among female sex workers compared to Kibera women in other occupations. An unexpected finding, however, was that female sex workers with a romantic partner had significantly fewer sexual partners per unit time than female sex workers without such a partner.

Results This finding held for multivariate analysis, with negative binomial regression analyses showing that having a romantic partner was significantly associated with reductions...