Introduction Urethral swabs are used for culture of gonorrhoea (NG) in males and for detection of chlamydia (CT) and NG by nucleic acid amplification tests (NAATs). We hypothesised self-collected penile swabs would perform as well as urethral swabs for detection of CT, NG, trichomonas (TV) and mycoplasma (MG).
Methods Men having urethral swabs obtained for NG culture in the STD clinic volunteered to collect penile swabs. Urethral swabs were placed into NAAT transport media; then self-collected penile swabs were placed in transport media. NAATs were performed for CT, NG, TV, and MG for urethral and penile swabs. Acceptability questionnaires were given.
Results For 203 urethral/penile pairs, there were 32 penile positive for CT (15.8%), 31 urethral positive for CT (15.3%); [sensitivity 96.8% and specificity 98.8% compared to urethral swabs]. There were 29 penile positives for NG (14.3%) and 27 urethral positives for NG (13.3%); [sensitivity 100%, specificity 98.9%]. 25 were Gram stain positive; 21 by culture. For TV, there were 23 penile positives (11.3%), 20 urethral positives (9.9%); [sensitivity 85.0%, specificity 96.7%]. For MG, 24 penile swabs were positive (11.8%); and 29 urethral were positive (14.3%); [sensitivity 79.3%, specificity 99.4%]. CT: 2 samples were penile+/urethral-, 1 was penile-/urethral+. NG: 2 samples were penile+/urethral-. TV: 6 samples were penile+/urethral-, 3 were penile-/urethral+. MG: 1 pair was penile+/urethral-, 6 were penile-/urethral+. There were no significant differences between self-collected penile swabs and clinician-collected urethral swabs for NAATs ($p = 0.625$ for CT; $p = 0.248$ for NG; $p = 0.344$ for TV; and $P = 0.070$ for MG). 100% of men preferred penile swabs for diagnosis.
Conclusions Self-collected penile swabs were as accurate as urethral swabs for the detection of sexually transmitted infections for NAAT assays and could expedite express visits in a busy STD clinic. Penile swabs show promise as a method of utilising one sample for multiple STIs.
Disclosure of interest statement The research group has previously received research funding from GenProbe/Hologic. No pharmaceutical grants were received in the development of this study.

O10.5 RAPID DIAGNOSIS OF *TRICHOMONAS VAGINALIS* BY TESTING VAGINAL SWABS IN AN ISOTHERMAL HELICASE-DEPENDENT AMPLIVUE® ASSAY

[1]M Chernesky*, [2]C Gaydos, [3]J Marrazzo, [4]M Hobbs, [5]J Schwebke. *[1]McMaster University, Hamilton, ON, Canada; [2]Johns Hopkins University, Baltimore, MD, USA; [3]University of Washington, Seattle, WA, USA; [4]University of North Carolina, Chapel Hill, NC, USA; [5]University of Alabama, Birmingham, AL, USA*

10.1136/sextrans-2015-052270.136

Introduction Infections due to *Trichomonas vaginalis* are treatable. Diagnostic methods such as wet mount microscopy are rapid but insensitive. Culture or traditional molecular assays are more sensitive but lack rapid results. Biohelix (a Quidel company) has created an isothermal, cassette-based, point-of-care molecular amplified test for the diagnosis of *T. vaginalis* in vaginal samples which can provide a diagnosis in 5 min. The objective was to demonstrate the clinical performance of the AmpliVue® Trichomonas assay on vaginal swabs from women with or without symptoms living in 5 geographical areas of North America.
Methods Women attending STD, family planning, colposcopy and OB/GYN clinics were invited to participate using an investigational research board approved consent form. A healthcare worker collected 4 swabs. The first and second swabs were randomised for wet mount and culture (In-Pouch system, Biomed Diagnostics). Cultures were inoculated and read at 2 and 3 days, and wet mount microscopy performed within 1 h of collection. The third was tested in AmpliVue® and the fourth in Aptima TV (ATV; Hologic, Inc), a transcription-mediated amplification assay. AmpliVue® and ATV testing was performed within 48 h. Positives by diagnostic method were compared to each other and agreements with kappa values were calculated between AmpliVue®and ATV.
Results A total of 1132 women (373 symptomatic and 759 asymptomatic) were enrolled. Comparing AmpliVue® to culture and wet mount as a patient infected status demonstrated 100% sensitivity, 98.2% specificity and 87.9–100% positive and negative predictive values in patients with or without symptoms. AmpliVue® showed strong overall agreement with ATV (97.5% 0.89 kappa).
Conclusion The AmpliVue Trichomonas Assay identified substantially more *T. vaginalis* infections and yielded accurate results in 45 min for the diagnosis and treatment of *Trichomonas vaginalis* in symptomatic and asymptomatic patients representing high and low-prevalence clinics. Clinicians can use this information for their clinics.
Disclosure of interest statement Dr. Chernesky has received research funding from Quidel.

O11 - Partners, places and STI risk

O11.1 PATIENT-DELIVERED PARTNER THERAPY (PDPT) INCREASES THE FREQUENCY OF PARTNER NOTIFICATION AMONG MSM IN LIMA, PERU: A RANDOMISED CLINICAL TRIAL

[1]Jesse L Clark, [1]Eddy R Segura, [2]Catherine Oldenburg, [3]Jessica Rios, [4]Silvia M Montano, [3]Javier Salvatierra, [3]Manuel Villaran, [3]Jorge Sanchez, [1]Thomas J Coates, [3]Javier R Lama. *[1]David Geffen School of Medicine, University of California, Los Angeles; [2]Harvard University School of Public Health; [3]Asociacion Civil Impacta Salud Y Educacion; [4]US Naval Medical Research Unit-6, Callao, Peru*

10.1136/sextrans-2015-052270.137

Background Patient-Delivered Partner Therapy (PDPT) improves treatment outcomes among sexual partners of individuals with curable STIs. Although use of PDPT with MSM has been questioned due to the high prevalence of undiagnosed HIV and syphilis in MSM networks, increasing partner notification (PN) through PDPT may promote testing and treatment of otherwise unidentified partners. We assessed the impact of PDPT on self-reported partner notification (PN) among Peruvian MSM with gonorrheal (GC) and/or chlamydial (CT) infection.
Methods We screened 898 MSM in Lima, Peru for GC and/or CT between 2012–2014. Screening included syndromic management of urethritis/proctitis and nucleic acid testing for GC/CT at urethral, pharyngeal, and rectal sites (Aptima Combo-2 TMA). Enrollment was limited to participants with symptomatic urethritis/proctitis (n = 44) and/or laboratory-diagnosed GC/CT infection (n = 263). 173 eligible participants were randomly assigned to receive either standard PN counselling (n = 84) or counselling and PDPT (Cefixime 400 mg/Azithromycin 1 g) for up to 5 recent partners (n = 89). Self-reported notification of recent partners was assessed by CASI with 155 participants who returned for 14-day follow-up.

Results The median age of all enrolled participants was 26 (IQR: 23–31), with a median of 3 (IQR: 2–4) partners reported during the previous 30-day period. Among all participants completing follow-up, 111/155 (71.6%) notified at least one partner, with a median of 1 partner notified per participant (IQR: 0–2). For participants randomised to receive PDPT, 69/83 (83.1%) reported notifying at least one partner, compared with 42/72 (58.3%) of participants in the control arm (p = 0.001). The proportion of all recent partners notified was significantly greater in the PDPT than the Control arm (53.5% vs. 36.4%; p = 0.004).
Conclusions Provision of PDPT led to significant increases in notification among Peruvian MSM diagnosed with GC/CT infection. Additional research is needed to assess the impact of PDPT on biological outcomes of HIV/STI transmission in MSM sexual networks.

O11.2 OVERCOMING THE AMBIGUITY OF SEXUAL PARTNERSHIP TYPE: A NOVEL CATEGORISATION USING DATA FROM BRITAIN'S 3RD NATIONAL SURVEY OF SEXUAL ATTITUDES AND LIFESTYLES (NATSAL-3)

[1]CH Mercer*, [1]KG Jones, [1]AM Johnson, [2]R Lewis, [2]KR Mitchell, [1]S Clifton, [1]C Tanton, [1]P Sonnenberg, [2]K Wellings, [3]JA Cassell, [4,5]CS Estcourt. *[1]Centre for Sexual Health & HIV Research, Research Department of Infection & Population Health, University College London; [2]Department of Social and Environmental Health Research, Centre for Sexual and Reproductive Health Research, London School of Hygiene and Tropical Medicine; [3]Division of Primary Care and Public Health, Brighton and Sussex Medical School, University of Brighton; [4]Blizard Institute, Barts and the London School of Medicine and Dentistry; [5]Barts Sexual Health Centre, St Bartholomew's Hospital*

10.1136/sextrans-2015-052270.138

Background The labels 'casual' and 'regular' partners are routinely used in both research and clinical contexts, yet considerable subjectivity surrounds the definition of different types of partnership in both professional and lay contexts, rendering comparison of audit and research findings problematic. We use national probability survey data to distinguish between different types of partnership, and examine the association between the resulting typology and reported STI diagnosis/es.
Methods 15,162 people aged 16–74y resident in Britain participated in Natsal-3 undertaken 2010–2012. Computer-assisted-self-interview was used for sensitive questions including those relating to participants' (max.) three most recent partners (N = 12,167 partners/past year). ANOVA and regression were used to test for differences in partnership duration and perceived likelihood of sex again across 20 'Partnership Progression Types' (PPTs) derived from reported relationship status at first/most recent sex with partners. Multivariable regression examined whether reporting STI diagnosis/es varied by partnership type after adjusting for partner numbers (all past year).
Results Four summary partnership types were identified from the 20 PPTs with median[IQR] durations and likelihoods of sex again (%), respectively, of:(1)'Long-term' = 175 months [83–323], 96.9% likelihood of sex again; (2)'Ex-steady' = 38 months [16–90], 44.9%; (3)'Now steady' = 17 months [6–41], 74.4%; (4)'Currently casual' = 3 months [0–14], 43.9%. These thresholds neither varied significantly by gender nor sexual identity, but did by age and sexual health clinic attendance. Reporting STI diagnoses varied according to the combination of partnership types experienced, including after adjusting for partner numbers, e.g. AOR for reporting STI diagnoses among men with both 'currently casual' and 'ex-steady' partners: 6.07 (95% CI: 1.41–26.1) vs. men with only 'currently casual' partners.
Conclusion Two survey questions enabled identification of four distinct types of sexual partnership in the British population. This typology is a valuable first step in defining partnership type, benefitting both research and practice, especially given recent moves towards more detailed reporting of sexual risk and partner notification outcomes.
Disclosure of interest statement AMJ has been a Governor of the Wellcome Trust since 2011. The other authors declare that they have no conflicts of interest.

O11.3 *TRICHOMONAS VAGINALIS* RISK AND COFACTORS AMONG PERIPARTUM KENYAN WOMEN: PROTECTIVE ASSOCIATION WITH MALE PARTNER CIRCUMCISION

[1,2]J Pintye*, [1]AL Drake, [3]JA Unger, [4]D Matemo, [4]J Kinuthia, [1,5,6,7]RS McClelland, [1,5,6,8]G John-Stewart. *[1]Department of Global Health, University of Washington, Seattle, USA; [2]Department of Nursing, University of Washington, Seattle, USA; [3]Department of Obstetrics and Gynecology, University of Washington, Seattle, USA; [4]Department of Research Programs, Kenyatta National Hospital, Nairobi, Kenya; [5]Department of Medicine, University of Washington, Seattle, USA; [6]Department of Epidemiology, University of Washington, Seattle, USA; [7]Institute of Tropical and Infectious Diseases, University of Nairobi, Kenya; [8]Department of Pediatrics, University of Washington, Seattle, USA*

10.1136/sextrans-2015-052270.139

Introduction *Trichomonas vaginalis* (TV) is the most common non-viral sexually transmitted infection (STI) worldwide and has implications for reproductive health in young women. We measured risk and correlates of peripartum TV.
Methods Kenyan women participating in a prospective study of peripartum HIV acquisition were enrolled during pregnancy and attended monthly follow-up visits until 9 months postpartum; HIV-seroconverters were excluded. TV was assessed every 1–3 months using wet mount microscopy and treated per Kenyan national guidelines. Recurrent TV was defined as TV detected ≥30 days after treatment or documented TV clearance. Male partner characteristics were reported by women. Andersen-Gill survival models were used to measure correlates of TV adjusting for age, socio-economic status, marital status, male partner circumcision status, and other STIs.
Results 1271 women enrolled at a median of 22 weeks gestation (interquartile range [IQR] 18–26), representing 1223 person-years. Most women were married (78%), reported no prior STIs (94%) and had uncircumcised male partners (69%); median age was 22 years (IQR 19–27). Overall, 196 TV infections were detected (81 prevalent at baseline, 115 incident during follow-up) and 56 (28%) were recurrent; 25% of infections were symptomatic. TV incidence was 9.4 per 100 person-years. In multivariate analyses, women with circumcised male partners had a 36% lower risk of incident TV compared to women with uncircumcised partners (adjusted hazard ratio [aHR] 0.64, 95% CI 0.43–0.94, p = 0.023). Having lower education (<8 years) (aHR 1.74, 95% CI 1.18–2.57, p = 0.005), being unmarried (aHR 1.75, 95% CI 1.10–2.78, p = 0.017), and recent *Chlamydia trachomatis* infection (aHR 2.06, 95% CI 1.24–3.44, p = 0.006) were associated with TV. Compared to nonuse, postpartum injectable or oral hormonal contraception use was not associated with TV risk.
Conclusion TV was relatively common in this peripartum cohort. Male circumcision promotion for HIV prevention may confer benefits in preventing TV among women in this setting.
Disclosure of interest statement We have no conflicts of interest to disclose.