**Introduction** In the UK people of black ethnicity experience a disproportionate burden of HIV and STI. We aimed to assess the association of ethnicity with sexual risk behaviours (SRB) and sexual health among heterosexual men and women.

Methods AURAH is a cross-sectional questionnaire study of people without HIV, recruited in 20 GUM clinics in England 2013–14. We assessed the association of ethnicity with (i) condomless sex with non-regular partner(s) (CLS-NR); (ii)  $\geq$ 2 new partners in the last year (2NPLY); and (iii) STI diagnosis in the past year (STI) using modified poisson regression adjusted for age, study region, education and relationship status.

**Results** 1075 heterosexual men (n=451) and women (n=624) completed questionnaires. Ethnicity was as follows: 513 (48.4%) black/mixed African (BA), 159 (15.0%) black/mixed Caribbean (BC), 288 (27.1%) white ethnicity (WE), 101 (9.5%) other ethnicity (OE).

Adjusted PR (95%CI)	CLS-NR	2NPLY	STI within last year
Women: White	1	1	1
BA	0.65(0.49-0.85)	0.36(0.27-0.48)	0.92(0.61-1.38)
BC	0.78(0.55-1.10)	0.39(0.25-0.61)	1.47(0.95-2.28)
OE	0.66(0.39-1.13)	0.60(0.37-0.99)	1.23(0.68-2.23)
Men: White	1	1	1
BA	1.05(0.83-1.32)	0.77(0.62-0.96)	1.14(0.75-1.73)
BC	1.02(0.73-1.44)	0.85(0.62-1.16)	1.76(1.10-2.82)
OE	0.69(0.43-1.09)	1.29(1.03-1.61)	0.59(0.24-1.43)

Compared with WE women BA women were less likely to report CLS-NR, BA and BC women were less likely to report 2NPLY, and BC women were more likely to report STI. In men CLS-NR did not vary significantly by ethnicity. BA men were less likely to report 2NPLY and BC men were more likely to report STI compared with WE men.

Discussion The prevalence of SRBs was lower in black ethnicity women, but history of STI was more prevalent among BC women. Similarly, higher STI history in BC men was not consistent with ethnic variation in SRB. Additional factors, e.g. sexual networks, may be important determinants of sexual health.

033

# SIGNIFICANTLY HIGHER RATES OF CHLAMYDIA FOUND IN ARMY PERSONNEL COMPARED WITH NON-MILITARY CLINIC ATTENDEES

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Introduction Our Sexual Health service covers a county-wide population, including large numbers of Army personnel. Despite military personnel being recognised as high risk for sexually-transmitted infections (STIs), accurate data on STI and HIV epidemiology within the military is lacking (1). The latter is compounded by difficulties differentiating military from civilian patients attending Sexual Health clinics. We introduced a local code ('ARMY') from April 2016. This has

enabled us to monitor numbers of Army attendees and compare STI rates and risk factors with non-military patients.

Methods Local 'ARMY' code added by clinicians at time of consultation, based on information including: patient self-reported occupation, garrison address, military uniform.

Electronic patient records for all male new or rebook attendees between 15/4/16 and 31/10/16 with an 'ARMY' code were reviewed (n = 234). These were compared with a non-military group of patients (n=234) attending during same time period and were matched for age group, gender, sexuality and presence/absence of symptoms.

Results Army personnel were found to have significantly higher levels of chlamydia positivity (19.2%) compared with non-military attendees (11.1%) (p= 0.020, Fisher's exact 2-tail). This higher rate of chlamydia was found despite comparable numbers of: sexual partners in prior three months, presentations as chlamydia contacts and high-risk alcohol users. Rates of gonorrhoea, warts, HSV, HIV and syphilis did not differ significantly. Army personnel were significantly more likely to be of non- white British ethnicity (11.1%) than non-military attendees (2.1%), reflecting local population (p=0.0001, Fisher's exact 2-tail).

Discussion Our findings support promotion of sexual health screening for military personnel and targeting of chlamydia testing. Military personnel often go home to other areas of UK and overseas during leave and could disseminate infections.

034

#### BINGE DRINKING, SMOKING AND EXPERIENCE OF INTIMATE PARTNER VIOLENCE AMONG WOMEN AGED 16–44 YEARS ATTENDING SEXUAL HEALTH CLINICS

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Introduction BASHH guidance includes assessment of smoking history, intimate partner violence and alcohol risk in Sexual Health (SH) clinics. As part of a study assessing psychosocial predictors of sexual risk among women of reproductive age, we investigated the prevalence of these issues and their associations with sexual risk.

Methods A convenience sample of women aged 16-44 years attending a busy urban integrated Contraception and Sexual Health clinic was invited to complete a questionnaire about socio-demographic, sexual behaviour and psychosocial factors. Results Of n=532 eligible women 44.5% were aged 16-24 years. 42.1% of participants reported binge-drinking (6+ units on one occasion) on a weekly basis. 36.7% reported currently smoking cigarettes or roll-ups. Using an adapted HITS domestic violence (DV) measure, 16.1% were classified as currently or previously experiencing DV. None of these factors was associated with reported risk of unintended pregnancy in the last 6 months. Multiple partnerships in the last year was not associated with DV experience (p=0.187) but remained positively associated, after adjustment for age, with current weekly binge-drinking (adjusted odds ratio = 2.13) and with current smoking (AOR =1.87).

Discussion Findings suggest that interventions for binge-drinking, cigarette smoking and DV may be warranted for a

substantial minority of women attending SH clinics. In particular observed associations between binge-drinking, cigarette smoking and multiple partnerships may point towards broader lifestyle choices that could be addressed concomitantly in SH clinics to help reduce sexual risk behaviour.

035

## SPATIAL AND TEMPORAL ASSOCIATIONS BETWEEN SEXUALLY TRANSMITTED AND RECENT CONGENITAL SYPHILIS CASES IN ENGLAND

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Introduction Four infants with congenital syphilis (CS) born to UK-born mothers who screened syphilis negative at first trimester antenatal screen were identified in England between March2016–January2017. Simulation modelling using historic data suggested the probability of observing these events was about 1%. We assessed whether these recent CS cases were associated with underlying epidemiology of infectious syphilis (IS).

Methods Data from 01/2011–09/2016 were obtained from GUMCADv2, the national STI surveillance system in England. We defined three syphilis epidemiological areas (SEAs): wider incident areas (WIAs; the affected and immediate surrounding counties); endemic areas (established epidemics in men who have sex with men-MSM); non-incident/non-endemic areas (NINEAs). IS rates/100,000 population were derived and associations between IS characteristics and SEAs were assessed using bivariate analyses. Mothers of CS cases were excluded from analyses.

Results From 2011–2016, IS rates/100,000 in WIAs rose in heterosexual women (1.5–2.5, 67% increase) and MSM (9.0–13.7, 52% increase) but fell in heterosexual men (4.3–2.7, 37% decrease). In NINEAs, rates rose in heterosexual women (1.6–1.9, 19% increase), MSM (5.0–11.9, 138% increase) and heterosexual men (2.7–3.2, 18% increase). In 2016, the proportion of UK-born heterosexual women with IS was greater in WIAs (82%) than in NINEAs (81%) and endemic areas (35%;p<0.001). The proportion of MSM identifying as bisexual was greater in WIAs (14%) compared with NINEAs (9%) and endemic areas (5%;p<0.001).

Discussion Increased syphilis transmission among MSM in WIAs may have created opportunities for IS acquisition in women. Health promotion to raise awareness of potential risks of acquiring syphilis during pregnancy is needed.



### MANAGEMENT OF ACUTE EPIDIDYMO-ORCHITIS – SUPPORTING TWO SERVICES

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10.1136/sextrans-2017-053232.36

**Introduction** The mismanagement of acute epididymo-orchitis (EO) can have significant sequelae. Guidelines exist for the management of EO and we audited practice across two departments (Urology and Genito-Urinary Medicine [GUM]) within a District General Hospital.

Methods Case notes of patients attending with acute EO between June 2015 – June 2016 were analysed retrospectively. Results 152 men were seen; 85 by Urology, 67 by GUM. Mean age at presentation was 49 years (range 17–89). A full sexual history was documented in 15.3% of Urology patients, compared with 100% of those seen by GUM. Conversely, a full urological history was documented in 25.9% of Urology patients, compared with 2% of GUM patients. The differences in investigations requested are shown in Table 1.

Of the urine samples sent for culture by Urology, 36.4% were positive, and 50% had antibiotic resistance.

As well as failing to test for STIs, none of the patients seen by Urology were given advice regarding sexual abstinence and contact tracing. These recommendations were made by the GUM team in 93% and 88% cases, respectively.

In GUM 94% of patients were prescribed recommended first or second line antibiotic therapy, compared with 11% in Urology who had a wide variation of antibiotic use.

Investigation	Urology (%) of patients tested	GUM (%) of patients tested
Urine dipstick	29.4	57.6
Mid-stream urine	51.8	28.4
Chlamydia/gonorrhoea -NAAT	0.0	97.0
Test for urethritis	0.0	36.0
Inflammatory markers	72.0	0.0
Serology for Blood-borne viruses	0.0	90.6

Discussion All patients in this audit were treated by teams with expertise in the management of EO. Our data shows despite well published guidelines being available, investigation and management could be improved. A combined clinical pathway for patients with acute EO could facilitate inter-speciality working and improve patient outcomes.



### GENITAL DERMATOLOGY IS A HIGH PROPORTION OF THE CASE LOAD PRESENTING TO WALK-IN SEXUAL HEALTH SERVICES ACROSS THE UNITED KINGDOM

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Introduction Patients with genital dermatology (GD) conditions frequently present to sexual health services. Following service tendering, there are reports of contracts excluding provision of specialist GD services within sexual health. We aimed to review the case load of GD conditions presenting to walk-in sexual health clinics, to reach an understanding of the demand for these services within our specialty.

Methods Members of the BASHH GD Specialist Interest Group collected data on the first 30 to 50 new symptomatic