Background Whereas the majority of STI-related consultations in the Netherlands take place in general practise (GP), national surveillance of STI predominantly uses data from STI centres, focussing at trends in high-risk groups. To also explore determinants of STI in the GP setting, an STI questionnaire was introduced in a nationwide GP-network.
Methods Since 2008, GPs of the Dutch Sentinel GP network (45 practises; 125,000 patients) are asked to complete a questionnaire for each STI-related episode, comparable to data collection in STI centres, and report laboratory results. Data included patient demographics, sexual behaviour and sex-life history.
Results Annually, for 0.4% of GP patients an STI consultation was recorded, mainly among young heterosexuals of Dutch origin, a profile comparable to STI centre visitors, though specific high-risk groups like MSM and CSW were reported less by GPs. GPs requested one or more laboratory tests in 83% of consultations; an STI was diagnosed in 34%, most frequently chlamydia (21%), condylomata (9%) and herpes (6%). Higher risk profiles were, depending on the STI: < 25 years old (chlamydia), MSM (gonorrhoea/syphilis), ethnic minorities (gonorrhoea), > 25 years old (syphilis) or having symptoms (any STI). GP guidelines on multiple testing in high-risk groups (5 STI) were rarely fully adhered to, with many missed opportunities to test for HIV in patients with casual sexual contacts or originating from HIV-endemic countries.
Discussion STI consultation rates were lower than estimates based on electronic registers, probably due to underreporting. Patients who consulted a GP for STIs were comparable to persons attending STI-centres. Where STI-centres routinely test patients for chlamydia, syphilis, HIV and gonorrhoea, GPs test more selectively, resulting in higher case detection rates. This diverges from national GP guidelines and STI diagnoses may be missed. Opportunities for a more proactive role of GPs in STI and HIV testing should be explored.

P3.035 PREVALENCE OF GENITAL MYCOPLASMAS AND BACTERIAL VAGINOSIS IN PREGNANT WOMEN IN GAUTENG, SOUTH AFRICA

doi:10.1136/sextrans-2013-051184.0495

[1]M J Redelinghuys, [1]M M Ehlers, [1,2]A W Dreyer, [3]H Lombaard, [1,2]**M M Kock**. *[1]Department of Medical Microbiology, University of Pretoria, Pretoria, South Africa; [2]Tshwane Academic Division, National Health Laboratory Service, Pretoria, South Africa; [3]Department of Obstetrics and Gynaecology, University of Pretoria, Pretoria, South Africa*

Background Bacterial vaginosis and genital mycoplasmas are reproductive tract infections that are associated with several infections and adverse pregnancy outcomes, such as pelvic inflammatory disease, preterm birth and spontaneous abortions in affected women. Bacterial vaginosis (BV), a polymicrobial condition, is reported to be prevalent in 15% to 20% of pregnant women while mycoplasmas colonise up to about 70% of sexually active women and antenatal patients.
Methods Self-collected vaginal swabs were obtained from 221 pregnant women. Bacteria vaginosis was diagnosed using the Nugent scoring system and a multiplex PCR assay was performed to detect genital mycoplasmas. *Mycoplasma hominis, M. genitalium, Ureaplasma urealyticum* and *U. parvum* were targeted, respectively, for the 16S rRNA gene, 140-kDa adhesion protein and the multiple-banded antigen genes.
Results The prevalence of bacterial vaginosis was 17.6% (39/221) with a total of 23.1% (9/39) of all BV-positive cases (score 7 to 10) being HIV positive. An intermediate grading according to the Nugent system (score 4 to 6) was given to 14.9% (33/221) of samples. *Ureaplasma parvum* was isolated from the majority of samples with a prevalence of 72.4% (160/221) followed by *M. hominis,* which was present in 50.7% (112/221) of all samples. The prevalence of *M. genitalium* and *U. urealyticum* was 14.5% (32/221) and 2.3% (5/221), respectively. *Mycoplasma hominis* was detected in 75% (27/36) of all HIV positive cases with *U. parvum* also present in 75% (27/36) of these cases.
Conclusions The overall prevalence of genital mycoplasmas in antenatal patients was relatively high when compared to previous studies, while BV prevalence correlated with other reports. *Ureaplasma parvum* and *M. hominis* were notably present in HIV positive patients. The diagnosis of genital mycoplasmas and BV in pregnant women in HIV-prevalent South Africa is vital to allow early intervention and minimise complications, such as undesirable pregnancy outcomes.

P3.036 GENITAL WARTS: DATA FROM THE ITALIAN GENERAL PRACTITIONERS

doi:10.1136/sextrans-2013-051184.0496

[1]A Pasqua, [2]**S Costa**, [3]M Salfa, [4]F Lapi, [3]B Suligoi. *[1]Health Search – Italian College of General Practitioners, Florence, Italy; [2]University of Bologna, Bologna, Italy; [3]Istituto Superiore di Sanità, Rome, Italy; [4]Italian College of General Practitioners, Florence, Italy*

Background Worldwide, several million cases of genital warts occur each year. The objective of this study was to estimate the incidence of genital warts (GW) in Italy, in a sample of the general population aged 15–64 years.
Methods A retrospective study was conducted in 2009 with the collaboration of 650 general practitioners (GPs), geographically representative of all Italian GPs.

Cases of GW were identified as follows: (1) individuals diagnosed with the ICD-9 code 078.11 (genital warts); or (2) individuals diagnosed with the ICD-9 code 078.10 (warts) who were prescribed podofillin/imiquimod treatment or were referred to a specialist (gynaecologist/dermatologist/urologist). Incidence was calculated using the number of persons included in the GPs lists as denominator. Individual data on age, gender, and area of residence were available.
Results The lists of the 650 GPs included 775,644 persons; their median age was 48 years, 52.7% were women. The incidence of GW was 0.44% (95% CI 0.39–0.49); specifically, 0.41% among men (95% CI 0.36–0.47) and 0.51% among women (95% CI 0.43–0.57). The highest incidence was observed among 25–34 year-old individuals (0.64%; 95% CI 0.52–0.78), for both genders. When stratifying by geographical area, the incidence was 0.40% in Northern Italy, 0.32% in Central Italy and 0.45% in Southern Italy.
Conclusions This is the first study to provide an estimate of the incidence of GW in the Italian population attending GPs. The incidence observed is similar to that reported by GPs in the UK (Desai S, 2011; Cassel JA, 2006). These results show that GPs can have a key role in preventing the spread of GW by providing early diagnosis and appropriate referral, especially among young persons, women and in persons living in Southern Italy.

P3.037 HIGH PREVALENCE OF GENITAL WARTS AMONG YOUNG WOMEN IN ITALY

doi:10.1136/sextrans-2013-051184.0497

[1]L Mariani, [2]M Salfa, [3]L Timelli, [4]G Vittori, [5]G Fattorini, [2]**B Suligoi**. *[1]Regina Elena National Cancer Institute, HPV-Unit, Rome, Italy; [2]Istituto Superiore di Sanità, Rome, Italy; [3]Informa srl, Rome, Italy; [4]Ospedale San Carlo di Nancy, Rome, Italy; [5]Azienda Sanitaria di Bologna, Bologna, Italy*

Background Worldwide, several million cases of genital warts occur each year. The objective of this study was to estimate the prevalence and the incidence of external genital warts (eGW) in a sample of women attending gynaecological ambulatories and to estimate the number of women with eGW among women aged 15–64 years in Italy.

Methods In 2010, 44 local gynaecologists were included in this prospective study. They reported demographic data for every woman aged 15–64 years that they visited for any reason. For women diagnosed with eGW, behavioural and clinical data were recorded. Prevalence was calculated as the proportion between the number of women with eGW and that of women visited; incidence was calculated as the proportion between the number of women with a new diagnosis of eGW and that of women visited. Standardized prevalence by age was used to estimate the number of eGW cases occurring in Italy in the female population aged 15–64 years.
Results In 2010, 16,410 women were included; 63 women were diagnosed with eGW (prevalence: 3.8%, 95% CI: 2.9–4.9). The highest prevalence was observed among 15–24 year-old women compared to women older than 25 years of age (7.2% vs 3.2%), with a trend significantly decreasing by increasing age (p-value < 0.001) and among women living in Southern Italy compared to those living in Central and Northern Italy (5.4% vs 2.5%, p = 0.003). The incidence was 3.0% (95% CI: 2.2–3.9). The estimated number of women with eGW among women aged 15–64 years in Italy in 2010 was approximately 69,000.
Conclusions These data confirm the prevalence of eGW reported in a retrospective Italian study conducted among gynaecologists (Vittori *et al*. 2008), and stress the importance of clinical networks in investigating STI epidemiology, as well as promoting safe sex, implementing early diagnosis, treatment and prevention.

P3.038 HEPATITIS C COINFECTION IN PERINATALLY INFECTED HIV CHILDREN

doi:10.1136/sextrans-2013-051184.0498

D P Pacola, M D Negra, Y C Lian, R A Carneiro, W Queiroz. *Instituto de Infectologia Emilio Ribas, São Paulo, Brazil*

Background this study analysed epidemiological aspects of HIV/HCV confection in HIV infected children at Instituto Infectologia Emílio Ribas, São Paulo, Brazil.
Methods HCV serology is performed on a routine basis on all children who attend our hospital. In this study, we analysed all patients with confirmed HCV infection (positive qualitative PCR for HCV). The data collected was age, sex, mode of transmission of HCV (HCV positive mother, use of blood transfusion and use of immunoglobulin).
Results Approximately 400 patients are seen regularly at our institute. Of these, 12(3%) were identified as HCV confirmed. 7 were females and 5 are males. Age ranged from 14 to 20 years on the moment of analysis. All patients were mother to child transmission of HIV. Regarding possible mode of transmission of HCV, 2 had HCV positive mothers, 2 had HCV negative mothers and 8 (66%) were unknown. Related to blood transfusions, 5 (42%) had history of blood transfusions, 6 (50%) did not and one was unknown, all blood transfusions were done at early infancy. All patients received immunoglobulin for more than 5 years (1993–2007) for prophylaxis of recurrent infections as recommend by national guidelines of HIV treatment. There were no cases of IV drug use. Two patients who initially had negative HCV serology a few years later seroconverted and had confirmation of HCV infection.
Conclusion our prevalence of HCV/HIV co-infection is higher than other studies, there was no significant difference between genders, unfortunately 8 children had unknown mother HCV condition, because many of them were orphans. Calls attention the use of biological products as a probable mode of transmission, in particular the 2 cases of confirmed sero-convertion observed.

P3.039 EARLIER MENARCHE IS ASSOCIATED WITH A HIGHER PREVALENCE OF *HERPES SIMPLEX* TYPE-2 (HSV-2) IN RURAL MALAWI

doi:10.1136/sextrans-2013-051184.0499

[1]**J R Glynn**, [2]N Kayuni, [2]L Gondwe, [1,2]A Price, [1,2]A C Crampin. *[1]London School of Hygiene & Tropical Medicine, London, UK; [2]Karonga Prevention Study, Chilumba, Malawi*

Background We have previously shown that girls with earlier menarche tend to have sexual debut and marry at a younger age, and to drop out of school earlier. We investigated the association between menarche and HSV-2 infection.
Methods The Karonga Prevention Study in northern Malawi includes demographic surveillance in a population of about 33,000. Information on sexual behaviour was collected in annual rounds from 2007 and serosurveys for HSV-2 were done. A question on age at menarche for women aged 15–30 was added midway through the first sexual behaviour round. For those with missing data on age at menarche from the first round the response from the subsequent round was used.
Results 6796 women were interviewed, 86% of those eligible. This included 3965 women aged 15–30: 3419 (86%) were tested for HSV-2 and 870 were positive (25.5%). 3166 reported age at menarche: approximately one quarter had menarche aged < 14, 14, 15 and ≥ 16. After adjusting for current age, there was a strong correlation between older age at menarche and lower prevalence of HSV-2: compared to those with menarche aged < 14, the age-adjusted odds ratios were 0.89 (95% CI 0.71–1.1), 0.71 (0.57–0.89) and 0.69 (0.54–0.89) for menarche aged 14, 15 and ≥ 16 respectively. This association persisted after adjusting for socio-economic factors, including schooling, and for proximal risk factors (marital status, age at first sex, lifetime number of partners).
Conclusion In this population earlier menarche appears to lead to multiple disadvantages. Since the association with HSV-2 persisted after adjusting for measured sexual behaviour factors this suggests that early menarche leads to riskier behaviours not captured in our survey, for example having higher risk partners. Age at menarche is likely to drop with improving nutrition, putting more young women at risk.

P3.040 THE EPIDEMIOLOGY OF HERPES SIMPLEX VIRUS TYPE-2 INFECTION AMONG PREGNANT WOMEN IN RURAL MYSORE TALUK, INDIA

doi:10.1136/sextrans-2013-051184.0500

[1,2]**K Krupp**, [3]A Bochner, [1]K Ravi, [1]B Niranjankumar, [1]A Arun, [1]V Srinivas, [1]P Jaykrishna, [1]R Shaheen, [2,1]P Madhivanan. *[1]Public Health Research Institute of India, Mysore, India; [2]Robert Stempel College of Public Health & Social Work, Florida International University, Miami, FL, United States; [3]School of Public Health, University of California Berkeley, Berkeley, CA, United States*

Objectives To assess the prevalence and correlates of herpes simplex virus type-2 (HSV-2) infections among pregnant women attending mobile antenatal health camps in rural villages in Mysore *Taluk*, India.
Methods A cross-sectional community-based study was conducted between June 2007 and Dec 2008 among pregnant women living in rural villages in Mysore *Taluk*. Each participant completed an interviewer-administered questionnaire in *Kannada* and consented to provide a blood sample for HIV testing and other antenatal investigations. All women were also screened for type specific HSV-2 IgG antibodies. Multivariable logistic regression models were used to analyse sociodemographic and other behavioural related characteristics related to the prevalence of HSV-2 infection.
Results There were 487 women found to be pregnant in the selected 52 different villages in Mysore *Taluk*. Majority (478/487, 98%) participated in the study and underwent an interviewer-administered questionnaire and other procedures. HSV-2 prevalence was 6.7% (95% confidence interval [CI] 4.4–9.0) among the study population, while only a single woman tested positive for HIV. The average age of women in was 21 years and had been married for an average of 34 months. Women whose main sex partner travelled away from home had 2.68 (CI: 1.13–6.34) times the odds of being HSV-2 seropositive