Methods Between June 2010 and 2012, self-collected (SVS) and clinician-collected vaginal (CVS) swabs were obtained from 79 young reproductive age women attending the Prerana Reproductive Health Clinic in Mysore, India. The study was explained to each participant and a brochure illustrating how to collect vaginal swabs was handed to them. The Gram-stained smears and saline wet mounts prepared from the SVS and CVS were examined by a trained microbiologist and the clinician. Vaginal pH was recorded for each swab. Kappa coefficient was used to quantify agreement between the two sets of results.

Results When compared with the CVS, the ability of the self-obtained Gram stain to diagnose bacterial vaginosis had a sensitivity of 100%, specificity of 98%, positive predictive value of 100% and negative predictive value of 100%. Only one pair was discordant in the results where the SVS showed the BV status as negative while the CVS found it to be intermediate stage BV. There was substantial agreement ($\kappa = 0.97$) between the two collection methods in the ability to determine the grade of vaginal flora.

Conclusion As compared with clinician collected vaginal smears, self-collected smears have substantial agreement in the diagnosis of bacterial vaginosis. With adequate education and instructions using simple visual illustrations, it is possible to have women sample and self collect vaginal swabs for diagnosis of lower genital tract infections.

P3.074 MEN'S PREFERENCES FOR STD SCREENING PROGRAMS: INITIAL PREVALENCE OF STD IN THE STUDY POPULATION

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Background STD control efforts in the US and western Europe have had less than desirable impact, in part due to an inability to reach populations of men at risk for these diseases. We are currently conducting a study of programme options, including self-collection of specimens and community based access to test kits, that would increase men's utilisation of screening services.

Methods Using peer-incentivized referral, a type of snowball sampling, beginning with men attending an STD clinic in the US, we are interviewing men in the community to determine the optimal combination of programme features that would encourage asymptomatic STD screening. To demonstrate the relevance of these men's opinions in terms of reaching a high prevalence group, they were tested for STDs at the time of their interview. Urine samples were collected and rectal sampling was offered to all men. STD testing was performed using nucleic acid amplification testing.

Results To date, 25 men from the community have been enrolled and interviewed. 40% of participants were black, 40% were white, and 20% were Hispanic. The median age of participants is 24. Urine samples were available for testing from all 25 men and rectal samples were available from 5 men. 4 (16%) men tested positive for a STD: 2 (8%) men tested positive for chlamydia and 2 (8%) men tested positive for trichomonas. No gonococcal infections were detected. None of the rectal samples had a positive result.

Conclusion While these results represent pilot data, the study is ongoing and given the nature of snowball sampling, the sample size will expand rapidly. Early prevalence rates are higher than have been reported in nationally representative surveys in the US. This suggests that we are recruiting from a population of interest to gather opinions about preferred screening options.

P3.075 TRENDS IN EPIDEMIOLOGY AND MANAGEMENT OF REPORTABLE SEXUALLY TRANSMITTED INFECTIONS (STIS) IN POLAND

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Background In Poland, among STIs syphilis and gonorrhoea are reportable since 1947, non-gonococcal genitourinary infections (NGU) - 1980, HIV infections - 1985, genital herpes, and anogenital warts (AGWs) - 1990.

Methods . Analysis of data on the incidence and management of gonorrhoea, syphilis, NGU, genital herpes, AGWs and HIV infections/AIDS cases available from reports of the National Institute of Public Health and the former Institute of Venereology, Poland.

Results Gonorrhoea. The average incidence rate was 1.24 per 100000 inhabitants during 2000–2011. Culture of *Neisseria gonorrhoeae* remains the mainstay of diagnosis and ceftriaxone is the recommended first-line treatment. Syphilis. The mean incidence rate from 2000 to 2011 was 1.91 per 100 000 inhabitants. The number of serological tests for syphilis (STS) performed gradually diminished from 1 200 000 in 2000 to less than 100 000 in 2011. In the same period 637 cases of syphilis in pregnancy or at delivery and 119 cases of congenital syphilis were diagnosed. The number of notified NGU cases decreased from 1981 in 2000 to 484 in 2011, that of genital herpes declined from 418 to 173 in respective years, and that of reported AGWs fluctuated (range from 400 to 1400 cases per year). Since the start of testing in 1985, 16 314 cases of HIV infection and 2 848 AIDS cases have been diagnosed until 2013. About 20% of all HIV infections were related to risky heterosexual intercourse. The incidence of notified HIV infection in Poland is increasing, while the incidence of the remaining reportable STIs is declining.

Conclusions The increasing HIV incidence and decreasing number of STS along with presence of congenital syphilis cases are of major concern. The reporting system of STIs in Poland is suboptimal.

P3.076 CANADIAN TRENDS IN SEXUALLY TRANSMITTED INFECTIONS, 2002 TO 2011

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Background In Canada, there are three nationally notifiable sexually transmitted infections (STI): chlamydia, gonorrhoea, and infectious syphilis (includes primary, secondary, and early latent infections). Surveillance of these infections involves local, provincial/territorial and federal levels of government. This analysis examines trends in the rates of reported cases of these STIs from 2002 to 2011.

Methods Reportable STI data are compiled at the national level to examine trends over time by age, sex, and geographical distribution of cases across the country. Data for 2011 are preliminary; therefore, sex-specific rates are not available at this time.

Results Preliminary reported rates of chlamydia and gonorrhoea in 2011 were 290.2 and 33.1 per 100,000, respectively. Rates increased 62% for chlamydia and 41% for gonorrhoea from 2002. Youth and younger adults have the highest rates of these infections, particularly in females. However, in older adults (40+ for chlamydia and 25+ for gonorrhoea), males have higher rates.

The rate of reported cases of infectious syphilis in 2011 was 5.1 per 100,000 (an increase of 240% from 2002). Increases have been driven almost entirely by cases reported among men; in 2010, it was reported in nearly 10 times as many males as females. Males aged 20 to 59 have high rates of reported infectious syphilis.

Conclusion While the implementation of nucleic acid amplification testing beginning in 1997 likely contributed to the initial rise in

STI rates at that time, it is improbable that its use has continued to affect rates to such an extent. The effects of erectile dysfunction and club drugs, sexual health education, and sexual practises on national STI rates have yet to be confirmed; more research is needed into these potential contributors. National efforts to combat the rising rates of STI include educational and clinical guidelines to prevent and control their spread.

P3.077 SOCIODEMOGRAPHIC AND CLINICAL PROFILE OF WOMEN WITH GENITAL INFECTION BY THE HUMAN PAPILLOMAVIRUS SEEN AT A BRAZILIAN REFERENCE HOSPITAL

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Introduction Infection by the human papillomavirus (HPV) is rated as a public health issue, and is considered to be the most common sexually transmitted disease (STD). It is estimated that approximately 600 million people in the world carry HPV, and that 75 to 80% will become infected with HPV some time in their lifetime. Therefore, the objective of this study was to analyse the sociodemographic and clinical aspects of women with genital infections by HPV.

Methodology This descriptive, quantitative study was performed at the Gynecology and Obstetrics Clinic for Infectious Diseases (Serviço de Moléstias Infeciosas em Ginecologia e Obstetrícia - SEMIGO) of the University Hospital of the Ribeirão Preto Faculty of Medicine, University of São Paulo (HCFMRP-USP), located in Ribeirão Preto, São Paulo, Brazil. The study included a total of 1027 women diagnosed with genital infection by HPV, which could be present in the form of low-grade squamous intraepithelial lesion (LSIL), high-grade squamous intraepithelial lesion (HSIL) or warts (vulvar, vaginal, cervical and perianal).

Results The predominant age group was between twenty and twenty-nine years of age, 387 (37.7%); 662 (64.4%) were of white ethnicity; 597 (58.1%) were married or lived with a partner; 438 (42.6%) had five to eight years of education; and 529 (51.5%) were unemployed. Regarding the type of lesion, 506 (49.3%) women had warts, 398 (38.8%) LSIL and 390 (38.0%) HSIL. Most did not consume alcohol (880 or 85.7%), tobacco (711 or 69.2%) or any other illicit drug (880 or 85.7%). Of all subjects, 702 (68.3%) tested negative for HIV, 823 (80.1%) negative for HBsAg, 777 (75.7%) negative for HCV, and 832 (81.0%) negative for VDRL.

Conclusion Women must be provided with access to high quality preventive tests through efficient mass screening programmes, and it must be ensured they receive clinical follow-up.

P3.078 PREVALENCE OF STI/STDs AMONG WOMEN OF REPRODUCTIVE AGE GROUP IN TRIBAL DISTRICT OF NORTH INDIA

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Research question What is the prevalence of RTIs/STDs among women of reproductive age group in a district of Kinnaur Himachal Pradesh **Objectives** (1) To estimate the prevalence of RTI/STI among women of reproductive age by using the syndromic case definition. (2) To identify the common signs and symptoms of RTI/STI among women (3) To find out other socio-demographic variables associated with causation of RTI/STI in women.

Study design Exploratory in nature with application of quantitative and qualitative research methodology.

Setting 60 clusters, comprising of villages in rural area and localities in urban area of district Kinnaur Himachal Pradesh North India.

Participants 600 ever married women in the reproductive age group (i.e. 15–45 years).

Study period One year (Feb, 2011– Jan, 2012).

Study variables Age, literacy status, number of live children, symptoms (according to the syndromic approach).

Statistical analysis Percentages, Chi square test.

Results Prevalence of RTI/STI came out to be 39.2% with a higher rural (44%) than urban (32%). Almost half of the symptom-positive women were of 25–34 years of age. Prevalence of RTI/STI was found to be highest among women with 1 or 2 live children (26.7% and 30.00%) in rural and urban areas respectively. The commonest symptom of RTI/STD was vaginal discharge (91%) followed by lower abdominal pain (64%). Other common associated symptoms were backache (76%), vulval itching (51%) and burning during urination (34%).

Conclusion In view of the higher prevalence of RTI/STD among rural and illiterate women primary health care level needs to be strengthened in respect of reproductive health, and awareness about reproductive health issues should be raised through suitable communication in order to bring about a positive behaviour change.

P3.079 PREVALENCE AND COFACTORS FOR STIS AMONG PREGNANT ADOLESCENTS IN WESTERN KENYA

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Background STIs among pregnant women contribute maternal and infant morbidity. There are limited data on STIs among pregnant adolescents. We determined and compared prevalence and correlates of STIs among pregnant adolescent and adult women in Western Kenya.

Methods HIV-1 negative women were enrolled during pregnancy. Demographic and clinical characteristics and blood and genital samples were collected. Chlamydia trachomatis (CT) and Neisseria gonorrhoea (GC) were detected using endocervical nucleic acid amplification, syphilis by rapid plasma reagin tests, and trichomonas vaginalis (TV) by wet preparations. Analyses were restricted to adolescents (age 14–21) and adults (age > 21) with STI data.

Results Among 1156 HIV-1 negative pregnant women, median age was 22 years and 537 (46%) were adolescents. Adolescents were less likely to be married (64% vs. 92%; $p < 0.001$) and more likely to have traded sex (13% vs. 3%; $p = 0.05$); adolescents and adults had similar prevalence of prior STIs (7%), vaginal drying (18%) and unprotected sex during past month (56%). The prevalence of STIs was: CT, 5%; GC, 2%; TV, 6%; and syphilis 1%. Compared to adults, risk of CT (odds ratio (OR) = 3.23; 95% Confidence interval (CI) = 1.83–7.73), GC (OR = 1.87, 95% CI = 0.84–4.16), and TV (OR = 1.61, 95% CI = 1.00–2.60) were higher among adolescents, but syphilis risk was lower (OR = 0.25, 95% CI = 0.05–1.17). Among adolescents, CT risk factors included ever trading sex (aOR = 2.71, 95% CI = 1.06–13.33). Among adults, TV risk factors included vaginal drying and lifetime number of sex partners; CT risk factors included vaginal drying and younger age. History of STI was a risk factor for syphilis among both adolescents and adults. No risk factors were identified for gonorrhoea.

Conclusion Prevalences of CT, GC, and TV were significantly higher among adolescents than adults in this pregnant cohort. Trading sex was more prevalent in adolescents and was associated with a 2.7-fold increased risk for CT among adolescents. Tailoring pregnancy STI screening approaches for adolescents may be useful.