p16 gene is increasingly accompanying the severity of lesions, but without statistical relevance.

**P3.209** AGE DIFFERENCES BETWEEN HETEROSEXUAL PARTNERS: IMPLICATIONS FOR THE SPREAD OF CHLAMYDIA TRACHOMATIS

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10.1136/sextrans-2017-053264.444

**Introduction** The consequences of mixing between sexual partners of different ages on the transmission and prevalence of sexually transmitted infections (STIs) are still not well understood. Using sexual behaviour data, we obtained a detailed quantitative description of sexual mixing by age. We then investigated the impact of age mixing on the age- and sex-specific prevalence and incidence of Chlamydia trachomatis (Ct) using a dynamic transmission model.

**Methods** First, we used age- and sex-specific data about the proportion of individuals who are sexually active, sexual partner change rates, and the ages of the three most recent partners at first episode of sexual intercourse from the second and third British National Surveys of Sexual Attitudes and Lifestyles (Natsal-2 and Natsal-3). We used a parametric description of the partner ages using skew-normal distributions and combined the data to reconstruct age mixing between heterosexual partners. Second, we incorporated the mixing patterns into a compartmental transmission model to investigate the age groups among which Ct is most likely to be transmitted and in which direction.

**Results** On average, males reported sex with younger female partners (median age difference = 3.3; IQR = [1.6, 8.9] years) and females reported having male partners of similar age (median age difference = 0.4; IQR = [2.7, 1.9] years). The median and the skewness of partner age distributions depend heavily on the age of the respondent. Ct-transmitting partnerships are typically between an older male and a younger female partner. In 60% of Ct-transmitting partnerships, at least one partner was >25 years old.

**Conclusion** Our study illustrates the importance of sexual mixing patterns on Ct spread and indicates that a majority of transmitted infections are in age groups outside of those included in typical Ct screening programs. Our method for the incorporating sexual behaviour data into dynamic transmission models can be used to study the transmission of any STI and to understand the potential impact of control strategies that target specific age groups.

**P3.211** PROFILE OF MEN WITH HIV+ INFECTION DIAGNOSIS: A COMPARATIVE STUDY ON A PUBLIC HEALTH SERVICE BETWEEN THE YEARS 2003 AND 2013

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10.1136/sextrans-2017-053264.446

**Introduction** To describe and compare the profile of men who had a positive diagnosis to the infection by the Human Immunodeficiency Virus (HIV) at a health service in the municipality of Nova Iguaçu in Baixada Fluminense, Rio de Janeiro, in the years 2003 and 2013.

**Methods** Comparative and retrospective study in which the patient’s medical records were utilised in the referred diagnostic service.

**Results** In 2003, 772 men were attended, and 116 (15.02%) were diagnosed with HIV, among them, 41 (35.3%) had 1 to 3 years of complete school education, 26 (22.4%) had 4 to 7 years of school education and 26 (22.4%) had 8 to 11 years. 20 (17.2%) individuals had STDs in the past year. 33 (28.4%) individuals made regular use of condoms and 32 men