

edPrEP and dPrEP and (ii) from either PrEP regimen to discontinuing PrEP, using a continuous-time, multi-state Markov model. **Results** Of 367 enrolled participants with follow-up, 73.3% chose dPrEP and 26.7% edPrEP at enrolment. During a median follow-up of 2.6 years (IQR=2.4–2.7), 114 (cumulative proportion=36.5%) switched their PrEP regimen at least once. In total, 85 switches from edPrEP to dPrEP (TI=0.41, 95%CI=0.33–0.50) and 98 from dPrEP to edPrEP (TI=0.17, 95%CI=0.14–0.20) occurred, with transitions from edPrEP to dPrEP 2.43-times more likely (95%CI=1.84–3.22) than *vice versa*. In multi-variable analysis, switching from edPrEP to dPrEP was associated with lower age, higher number of sex acts with casual partners, chemsex and living alone, whereas switching from dPrEP to edPrEP was associated with lower age, lower number of casual partners, higher number of sex acts with casual partners and lower score on the New Sexual Satisfaction Scale. A total of 61 individuals discontinued PrEP, with no difference from which regimen: edPrEP (n=22, TI=0.10, 95%CI=0.06–0.15) and dPrEP (n=39, TI=0.06, 95%CI=0.04–0.08). PrEP discontinuation was only associated with lower age (from dPrEP).

**Conclusion** Switching between PrEP regimens is common and more frequent among younger MSM and MSM with higher number of sex acts, who may benefit from client-centered counseling. Rates of PrEP discontinuation are low and are linked to younger age.

**Disclosure** No significant relationships.

## 009 – EPIDEMIOLOGY AND SURVEILLANCE TO INFORM PRACTICE AND POLICY

Tuesday, July 16, 2019

10:45 AM – 12:15 PM

### 009.1 THE NETHERLANDS CHLAMYDIA COHORT STUDY: PREGNANCIES IN WOMEN WITH AND WITHOUT A PREVIOUS CHLAMYDIA INFECTION

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**Background** Studies have shown an association between *Chlamydia trachomatis* infection (chlamydia) and an increased risk for tubal factor infertility (TFI) in women. To assess if this association also result in fewer pregnancies, we aimed to investigate the proportion of pregnancies in women with and without a previous chlamydia infection in women participating in the Netherlands Chlamydia Cohort Study (NECCST).

**Methods** NECCST is a cohort of 5704 women of reproductive age all tested for chlamydia by PCR in a chlamydia screening study between 2008–11. Women were re-invited for NECCST in 2015–16. Chlamydia-status (positive/negative) was defined using results from the screening, chlamydia IgG presence in serum and/or self-reported chlamydia infections. Data on pregnancies was collected via questionnaires in 2015–16 and 2017–18. Pregnancies, intended and unintended, were

compared between chlamydia positive and chlamydia negative women who ever tried to become pregnant using logistic regression analyses.

**Results** Of 5704 women enrolled, 1717 (30.1%) were chlamydia positive and 3146 (55.2%) tried to become pregnant or had been pregnant at least once. In preliminary results, of those 3146 women, 980 (31.2%) were CT positive and 2166 (68.8%) were CT negative. Of CT positive women, 90% (n=882) got pregnant compared to 91% (n=1973) of CT negative women, p=0.329. Excluding unintended pregnancies, CT positive women got pregnant less often (82% versus 89%, p<0.001) and aOR 0.56 (95%CI 0.42–0.74, p<0.001) corrected for age.

**Conclusion** The proportion of women who were ever pregnant did not differ between chlamydia positive and negative women. However, an intended pregnancy was less common in women with a previous chlamydia infection.

**Disclosure** No significant relationships.

### 009.2 DECLINES IN CHLAMYDIA-ASSOCIATED PID AT SSSHs IN ENGLAND SINCE 2007: WHAT MIGHT THIS TELL US ABOUT CHLAMYDIA CONTROL?

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**Background** In 1998 the United Kingdom Chief Medical Officer recommended action to reduce the prevalence and morbidity associated with chlamydial infection. The introduction of NAAT testing from 2003 and the roll-out of the National Chlamydia Screening Programme (NCSP) in England from 2004 to 2008 (all regions participating) resulted in large increases in chlamydia screening and diagnoses: 2.3 million tests were reported in 2010 among 15 to 24 year-olds, equivalent to 44% of women and 24% of men in this age group. We investigated rates of diagnoses of pelvic inflammatory disease (PID) in women attending specialist sexual health services (SSHS) since 2007.

**Methods** Data were extracted from the GUMCAD surveillance system from 2007–2017. To explore the effect of changes in access to SSHS over this time, total number of attendances were also extracted and changes in PID diagnoses were compared to those of a symptomatic clinical presentation with no active control programme, vaginosis/vaginitis (bacterial vaginosis, candidiasis, trichomoniasis).

**Results** Between 2007 and 2017 PID diagnoses decreased by 18%. Chlamydia-associated-PID (CT-PID) diagnoses decreased by 46%, and the% of PIDs associated with CT fell from 14.7% (~2,400) to 9.7% (~1,300). GC-associated-PID increased 34% (to ~300). Decreases were greater in under 25s and in years up to 2011/12. Attendances by women under 25 increased over this time, and there was a 6% increase in diagnoses of vaginitis/vaginosis, with CT-PID decreasing by 49% relative to vaginitis/vaginosis.

**Conclusion** There has been a marked decline in diagnoses of CT-PID, and all PID, at SSHS subsequent to the introduction of wide-spread chlamydia screening. This has occurred despite an increase in attendances at SSHS and access for symptomatic women (vaginosis/vaginitis). Further work will explore trends by region and in general practice, and will determine whether CT-PID rates might be a metric for the success of chlamydia control.

**Disclosure** No significant relationships.