Methods A cohort study was conducted among heterosexual STI clinic visitors aged 18–24 years. Risk classes based on behavioural and psychological characteristics, and transitions between classes three weeks after chlamydia testing, were identified using latent transition analysis. We developed a pair compartmental model with a susceptible-infected-susceptible structure informed by the cohort study. We estimated the impact of sustaining the found short-term effects of testing and of interventions enhancing these effects in those diagnosed, in those tested negative, or in all tested on chlamydia prevalence after five years relative to no effect.

Results Four classes were identified (n=810, 13% chlamydia positive (CT+)); 19% of people were in class 1 (5% CT+), 15% in class 2 (10% CT+), 47% in class 3 (16% CT+), and 19% in class 4 (17% CT+). The number of new partners in the past year was higher in class 3 and 4, compared to class 1 and 2. Class 2 and 4 had lower intentions to use condoms, reported less condom use, and were more impulsive, compared to class 1 and 3. Chlamydia positives were more likely to move to a lower risk class after testing, compared to chlamydia negatives. Sustaining this short-term effect resulted in an estimated relative reduction in chlamydia prevalence of 27%. The impact of interventions enhancing behaviour change in those tested negative (−45%) or in all tested (−48%) was estimated to be larger than in those diagnosed (−31%).

Conclusion Testing has strong short-term effects in chlamydia positives, but not in chlamydia negatives. Sustaining these effects is vital in controlling chlamydia transmission, as are interventions enhancing behaviour change in chlamydia negatives.

Disclosure No significant relationships.

Background Chlamydia trachomatis and Mycoplasma genitalium are both intracellular pathogens of Sexually Transmitted Infection (STI) that has been reportedly associated with various gynaecological morbidities. The asymptomatic carrier state of Chlamydia trachomatis and Mycoplasma genitalium facilitates infertility sequelae and perinatal transmission among other complications. Due to the fastidious nature of both organisms, Polymerase Chain Reaction (PCR) are considered more reliable for accurate diagnosis. The aim was to determine the prevalence and risk factors for Chlamydia trachomatis and Mycoplasma genitalium infection among infertile women in University College Hospital, Ibadan, Nigeria.

Methods A Cross-sectional hospital-based study conducted at the Infertility clinic of the University College Hospital, Ibadan, Nigeria using random sampling technique. Ethical approval was received from UI/UCH ethical approval committee.

Information was collected from the 150 consenting women using structured questionnaire, on sociodemographic and behavioral characteristics of the respondents. Endocervical swabs were obtained for DNA extraction. The presence of Chlamydia trachomatis and Mycoplasma genitalium were detected from the extracted DNA by the use of conventional PCR. Bands corresponding to 241 and 495kb were documented as positive for Chlamydia trachomatis and Mycoplasma genitalium respectively. All data were analyzed using SPSS version 20.0. Associated risk factors were assessed with logistic regression.

Results Among the infertile women 11(7.30%) had evidence of Chlamydia trachomatis and 32(21.3%) Mycoplasma genitalium. Only 10.7% had co-infection. Associated risk factors of Chlamydia trachomatis included past history of gonorrhea (OR=8.37, p value = 0.002) and Multiple sex partners (OR= 6.67, p value= 0.007). No associated risk factors were found for Mycoplasma genitalium.

Conclusion Considering the prevalence of Chlamydia trachomatis, the high rates identified for Mycoplasma genitalium as a single infection and the low co-infection among the participants, their screening should be included in the microbiological evaluation of infertile women. The risk factors for the infections are similar to those peculiar to other STI

Disclosure No significant relationships.