

THEART OF RESEARCH



Treating *Chlamydia trachomatis* in young women

The silent *Chlamydia trachomatis* infection is harming young women softly.

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The silent *Chlamydia trachomatis* infection can cause damage to young women.

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Sexually transmitted infections (STIs) are a serious threat to women's reproductive health and a risk factor for the human immunodeficiency virus (HIV).

Globally, the incidence of *Chlamydia trachomatis* has increased steadily, and the proportion of *Chlamydia trachomatis* asymptomatic infections is particularly large.

The burden of inflammatory STIs is high in South Africa, and especially among young women, who are affected more than men. Most of the infected young women are asymptomatic and have similarly high levels of genital inflammation to those in women with symptomatic disease. Genital inflammation is associated

with STIs like *Chlamydia trachomatis*, which further increases the chances of getting HIV and transmitting it to others. *Chlamydia trachomatis* infection in women's urogenital area also increases susceptibility to other STIs.

Researchers at the University of Cape Town are looking at the different strains found in HIV high-risk adolescent women in South Africa, using strain typing methods like high-resolution multi-locus sequence typing and whole genome sequencing.

"I am trying to establish whether there is a relationship between genital inflammation and persistence, focusing specifically on sequence

variation in *Chlamydia trachomatis* virulence and antigen factors," says Pride Kanyoka.

If *Chlamydia trachomatis* is not treated and remains asymptomatic, it can lead to severe life-long complications, like pelvic inflammatory disease, ectopic pregnancy, chronic pelvic pain, infertility and adverse pregnancy outcomes.

"Surveillance and screening programmes can be created to treat and screen young women. The project will contribute to new diagnostic and effective prophylactic measures that can be developed to combat the high *Chlamydia trachomatis* prevalence in South Africa."

