

Sex work, HIV and sexually transmissible infections

A study of incidence among women attending sexual health clinics

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Background

- . In many parts of the world, female sex workers are at an increased risk of HIV and other sexually transmissible infections (STIs)
- . In Australia, female sex workers are identified as a 'priority population' in strategies for the prevention of STIs

Participants

- From 2009 to 2015:
- . 130,377 female patients attended; 15,629 (12%) reported sex work
 - . Median age=30 years (sex workers), 25 years (non-sex workers), $p<0.001$

Methods

- . De-identified patient data were extracted from 42 publicly-funded sexual health clinics in Australia
- . Clinics participated in the *Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of STIs and Blood Borne Viruses ('ACCESS')*
- . Incidence rates were calculated using repeat testing methods
- . Incidence was stratified by sex work in the 12 months prior to a consultation
- . Trends over time were assessed using Poisson regression analyses
- . Behavioural and demographic factors associated with infection were assessed using Cox regression analyses, stratified by clinic

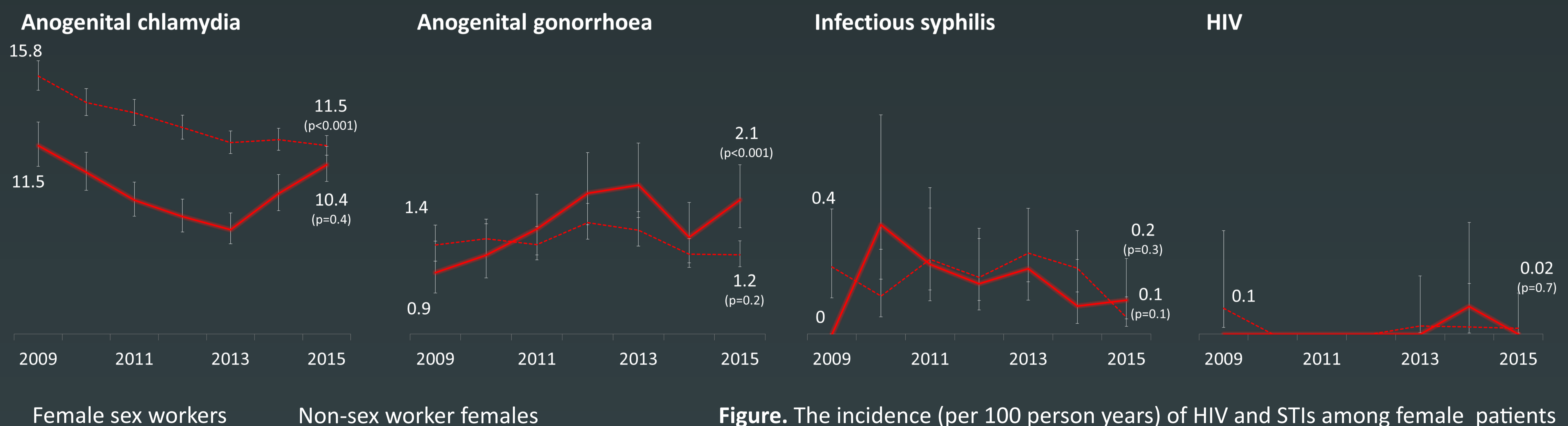


Figure. The incidence (per 100 person years) of HIV and STIs among female patients

Table. Overall incidence and Cox regression analysis outcomes

	Sex workers	Non-sex workers	Sex work: adjusted hazard ratio*
Chlamydia (anogenital)	8.9/100PY	12.8/100PY	3.3 (95%CI: 2.4-4.5), $p<0.001$
Chlamydia (pharyngeal)	1.9/100PY	0.7/100PY	1.4 (95%CI: 0.4-1.8), $p=0.07$
Gonorrhoea (anogenital)	1.7/100PY	1.4/100PY	2.5 (95%CI: 2.1-2.9), $p<0.001$
Gonorrhoea (pharyngeal)	3.7/100PY	2.2/100PY	1.7 (95%CI: 1.1-2.7), $p=0.016$
Infectious syphilis	0.3/100PY	0.3/100PY	0.7 (95%CI: 0.5-1.1), $p=0.2$
HIV	0.02/100PY	0.02/100PY	--

*Multivariate analyses covariates: Age, Indigenous status, neighbourhood location, condom use, private partner numbers, symptomatic presentation, injecting drug use

Conclusions

- . HIV and infectious syphilis remain uncommon among female sex workers in Australia
- . Anogenital gonorrhoea increased steadily among sex workers while remaining stable among non-sex workers
- . After a period of decline, chlamydia incidence has increased among female sex workers
- . Sex work was associated with an increased risk of incident anogenital chlamydia and anogenital/pharyngeal gonorrhoea

