TRENDS IN PREVALENCE OF GONORRHOEA AND CHLAMYDIA AMONG FEMALE SEX WORKERS IN NORTHERN SYDNEY BETWEEN 2005 AND 2019

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Background:
Consistent condom use is the major risk reduction for infection with many STIs. Safe sex behaviour by female sex workers (FSWs) in Australia fluctuates, with recent surveys suggesting stable condom use for vaginal sex, but a decrease for oral sex. Two recent studies report increasing gonococcal and chlamydial infections among FSWs, particularly pharyngeal infections. Our aim was to determine the prevalence of gonorrhoea and chlamydia among FSWs attending our clinic between 2005 and 2019.

Methods:
We conducted a retrospective electronic medical record analysis, supplemented by manual extraction of information from medical records, of all self-identifying FSWs who attended our clinic between January 2005 and December 2019. Yearly prevalence of gonorrhoea and chlamydia was defined as positive individual cases divided by the total number of individuals tested for that infection. Repeat infections in individuals during each year were counted as only one case.

Results:
Prevalence of gonorrhoea (all mucosal sites) varied from 1/158 (0.6%) in 2005 to 21/189 (11.1%) in the middle year (2012), to 46/304 (15.1%) in 2019 (Chi-square for trend over 15 years=73.4; P<0.01). During the most recent four study years, pharyngeal gonorrhoea comprised 68% of all prevalent gonococcal infections. Prevalence of chlamydia (all mucosal sites) varied from 5/158 (3.2%) in 2005 to 8/189 (4.2%) in 2012, to 32/304 (10.5%) in 2019 (Chi-square for trend over 15 years=28.0; P<0.01). During the most recent four study years, pharyngeal chlamydia comprised 37% of all prevalent chlamydial infections.

Conclusion:
Over the 15 year study period, increasing numbers of FSWs at our clinic probably reflects the efforts of health promotion and dedicated language clinics for Asian-speaking FSWs. Pharyngeal infections, particularly gonococcal, comprise a large proportion of the significantly higher prevalence of gonorrhoea and chlamydia in the recent years. Enhanced and sustainable health promotion is required.