ATTITUDES TOWARDS AND USE OF ANTIBIOTIC PROPHYLAXIS FOR SEXUALLY TRANSMITTED INFECTIONS IN AUSTRALIA; AN ONLINE SURVEY

Cornelisse VJ^{1,2,3,4}, Callander D^{4,5}, Fairley CK^{1,2}, Russell DB^{6,7}.

Affiliations:

- 1. Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia
- 2. Central Clinical School, Monash University, Melbourne, Australia
- 3. Department of Infectious Diseases, The Alfred Hospital, Alfred Health, Melbourne, Australia
- 4. The Kirby Institute of Infection and Immunity, The University of New South Wales, Sydney, Australia
- 5. Department of Population Health, School of Medicine, New York University, New York, USA
- 6. James Cook University, Cairns, Australia
- 7. The University of Melbourne, Melbourne, Australia

Background: Antibiotic prophylaxis can reduce the risk of sexually transmitted infections (STIs), but concerns remain about the safety and feasibility of its implementation. We conducted an online survey to quantify current use of and interest in antibiotic prophylaxis among Australian gay and bisexual men.

Methods: From June to December 2018 our survey was promoted through gay community organisations and Australia's largest sexual health clinic. The survey asked about demographics, sexual history, drug use, use of HIV pre-exposure prophylaxis (PrEP), history of STIs, use of antibiotic prophylaxis and attitudes towards antibiotic prophylaxis. We used logistic regression analyses to compare responses from respondents who had used antibiotic prophylaxis, respondents who had used antibiotic prophylaxis, respondents who had not used but were interested, and respondents who were not interested.

Results: A total of 517 survey responses were complete: 68 respondents (13%) had previously used antibiotics to prevent STIs and 323 (63%) expressed interest in using antibiotic prophylaxis. In univariate analyses, compared to respondents with no previous use and no interest, users of antibiotic prophylaxis were older (*Mdn*=43 years *vs Mdn*=34 years, p=0.018), had higher numbers of sexual partners (*M*=14 *vs M*=5, p=0.002), were more likely to report recent group sex (64.7% *vs* 42.1%, p=0.003), to be using HIV PrEP (66.2% vs 35.7%, p<0.001), and report a recent bacterial STI diagnosis (57.4% vs 31.0%, p<0.001). However, in multivariate analysis, users of antibiotic prophylaxis were not more likely to report a recent bacterial STI diagnosis (aOR=1.65, 95%CI 0.8-3.5), after adjusting for age, sexual partner numbers, drug use, and PrEP use.

Conclusion: Most respondents expressed interest and 13% had used antibiotic prophylaxis. Users of antibiotic prophylaxis reported more STI risk factors and had more bacterial STIs than non-users. But after adjusting for confounders, use of antibiotic prophylaxis was not independently associated with a higher risk of STIs.

Disclosure of Interest Statement: The authors have no relevant conflicts of interest to declare.