


# Prophylactic use of antibiotics for sexually transmitted infections: awareness and use among HIV PrEP users in Belgium

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Doxycycline prophylaxis has been shown to reduce the incidence of chlamydia and syphilis infections in various studies, but researchers are worried about increasing antimicrobial resistance (AMR).<sup>1</sup> Although not currently recommended, STI prophylaxis has been reported in high-risk men who have sex with men, with proportions ranging from 2% to 10%.<sup>2</sup> We assessed the awareness and use of STI prophylaxis among HIV pre-exposure prophylaxis users in Belgium in a nested cross-sectional online survey in December 2021 and January 2022. Participants were recruited through social media, HIV reference centres and social/sexual networking applications. A total of 187 participants completed the survey. The median age was 46 years (IQR 38–53). The majority were born in Belgium (161/187, 86.1%) and identified themselves as male (183/187, 97.9%). Fifty-four participants (28.9%) had ever heard of STI prophylaxis, 21 (11.3%) knew someone who used it and 6 (3.2%) reported having used STI

prophylaxis themselves. Three users reported taking it only after sex and three both before and after sex. Two had used doxycycline, one azithromycin, one amoxicillin and antibiotic was unknown in two cases. Two participants reported having taken STI prophylaxis in the previous month, two in the previous 1–6 months and two >12 months ago. Two participants had obtained these antibiotics through an HIV/STI clinic, one from a sex partner and three reported using leftovers. Although the use of STI prophylaxis was limited in our sample, a substantial proportion of participants were aware of STI prophylaxis or knew persons using it, suggesting that this phenomenon may be more common than initially thought. Another concern is that some antibiotics with a high propensity to induce AMR or no efficacy in reducing the occurrence of bacterial STIs were used. Sensitisation of patients and healthcare providers is needed, as well as further research on the net benefits and risks of STI prophylaxis.

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