Correspondence on "A case for the inclusion of doxycycline post-exposure prophylaxis for sexually transmitted infections among men who have sex with men in sub-Saharan African countries' guidelines for the management of sexually transmitted infections" by "Dzinamarira et al"

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Sexually transmitted infections (STIs) pose a significant public health challenge, particularly among men who have sex with men (MSM), since significantly they multiply the risk of HIV transmission. The risk of HIV infection among MSM is 28 times greater than that for other adult men. Doxycycline post-exposure prophylaxis (PEP) has emerged as a potential intervention to reduce the transmission of STIs in MSM. In this correspondence, we review the literature on the efficacy of doxycycline PEP and the risk of antimicrobial resistance, highlighting the need for the inclusion of doxycycline PEP for STIs among MSM in African countries' guidelines for the management of STIs.

Several studies have demonstrated the potential effectiveness of doxycycline PEP in reducing the incidence of STIs.^{1,2} Willingness to use doxycycline for STI prophylaxis is also reportedly high. These findings suggest that doxycycline PEP has the potential to be an effective strategy for preventing STIs in MSM. However, it is important to note that doxycycline PEP is not 100% effective, and it is not a substitute for other forms of STI prevention, such as using condoms and getting tested regularly.

The risk of antimicrobial resistance is a concern when considering the scale-up of any antimicrobial intervention. However, the available literature^{1, 2} does not provide substantial evidence of doxycycline resistance associated with PEP use. However, frequent resistance tests will be required to ensure that the drug will remain effective in preventing STIs after the scale-up.

The available literature supports the case for the scale-up of doxycycline PEP for STIs among MSM. The efficacy of doxycycline PEP in reducing the incidence of STIs, coupled with the low risk of antimicrobial resistance, makes it a promising intervention. The high interest in doxycycline PEP among MSM and its favourable safety profile further strengthen the argument for its scale-up.

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References

- 1. Luetkemeyer AF, Donnell D, Dombrowski JC, et al. Postexposure doxycycline to prevent bacterial sexually transmitted infections. N Engl J Med 2023;388:1296–306.
- 2. Molina J-M, Charreau I, Chidiac C, et al. Post-exposure prophylaxis with doxycycline to prevent sexually transmitted infections in men who have sex with men: an open-label randomised substudy of the ANRS IPERGAY trial. Lancet Infect Dis 2018;18:308–17.