

High Syphilis Incidence among PrEP-adherent men who have sex with men and trans women PrEP users

Silver K. Vargas 1, Kelika A. Konda 1, Ronaldo Moreira 2, Luri. Leite 2, Marcelo Cunha 2, Brenda Hoagland 2, Juan V. Guanira 1, Cristina Pimenta2, Beatriz Grinztejn 2, Valdiléa Veloso 2, Carlos F. Caceres 1

1Universidad Peruana Cayetano Heredia, Center for Interdisciplinary Studies in Sexuality, AIDS and Society, Lima, Peru.

2Oswaldo Cruz Foundation/Fiocruz, Evandro Chagas National Institute of Infectious Diseases, Rio de Janeiro, Brazil.

Background:

- Syphilis remains a public health concern in Peru.
- PrEP implementation programs in Latin America need to assess, along with their feasibility, their impact on STIs.
- We evaluated the relationship between PrEP adherence and syphilis incidence among men who have sex with men (MSM) and transgender women (TW) enrolled in ImPrEP in Peru. ImPrEP was a multi-country PrEP demonstration project, however, this analysis focuses on Peru.

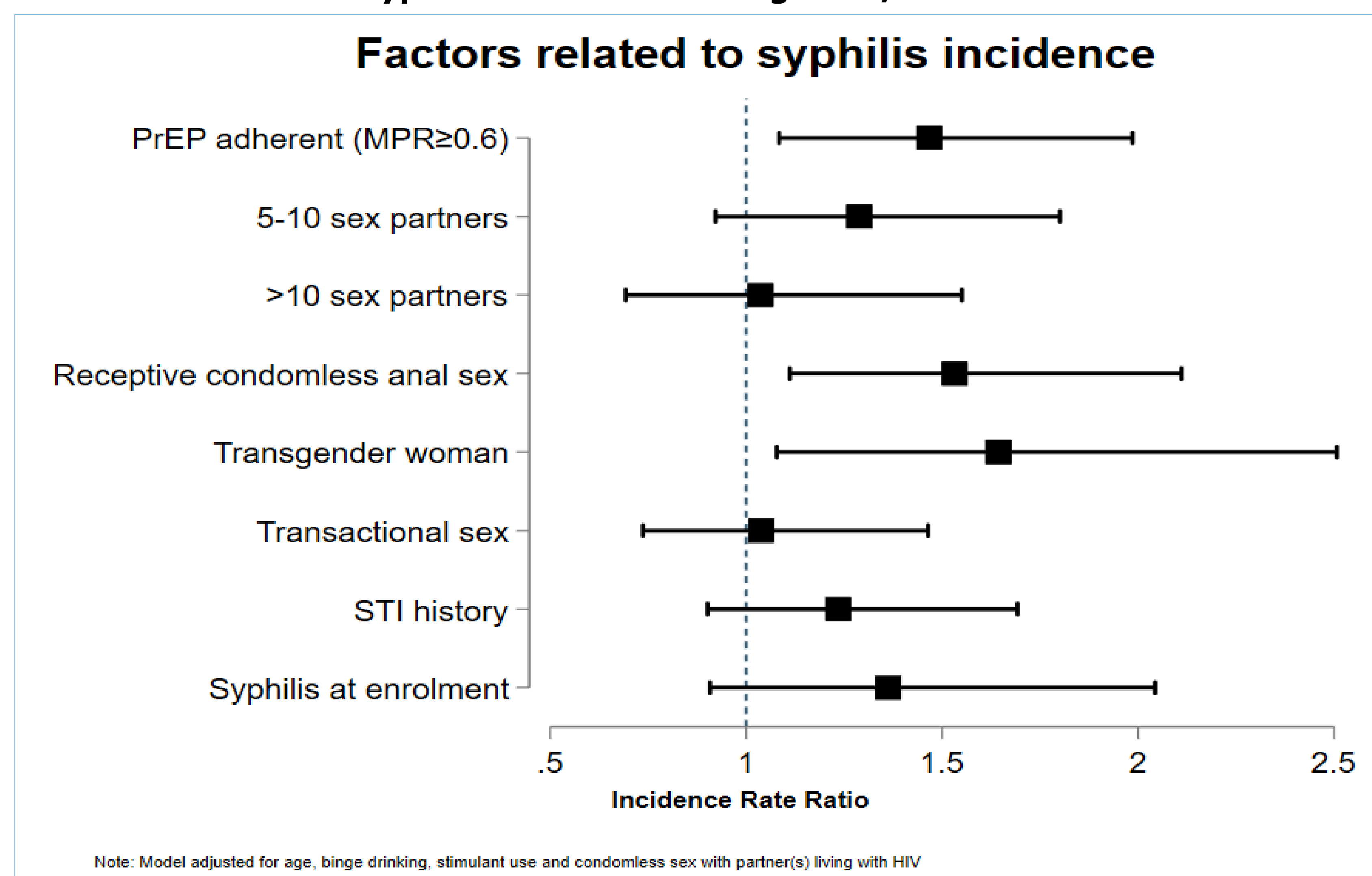
Methods:

- From April 2018 to June 2021, 2,293 HIV-negative MSM/TW attending Peruvian STI clinics were offered PrEP, consented, and enrolled in ImPrEP.
- Participants were ≥ 18 yo who reported recent (previous 6 months) condomless anal sex, sex with HIV positive/unknown status partner, STI history (diagnosis or signs/symptoms) and/or transactional sex.
- Follow-up visits and PrEP dispensation were quarterly, included HIV and syphilis testing (rapid treponemal test and RPR if syphilis-negative at enrolment, or only RPR if rapid treponemal test was reactive at baseline), plus behavioral assessment.
- PrEP adherence assessment included medication possession ratio (MPR: number of pills prescribed/number of days between visits) for each visit.
- GEE Poisson regression models were used to evaluate factors related to syphilis incidence, and changes in this incidence due to COVID-19 emergency lockdown (declared March 15, 2020).

Results:

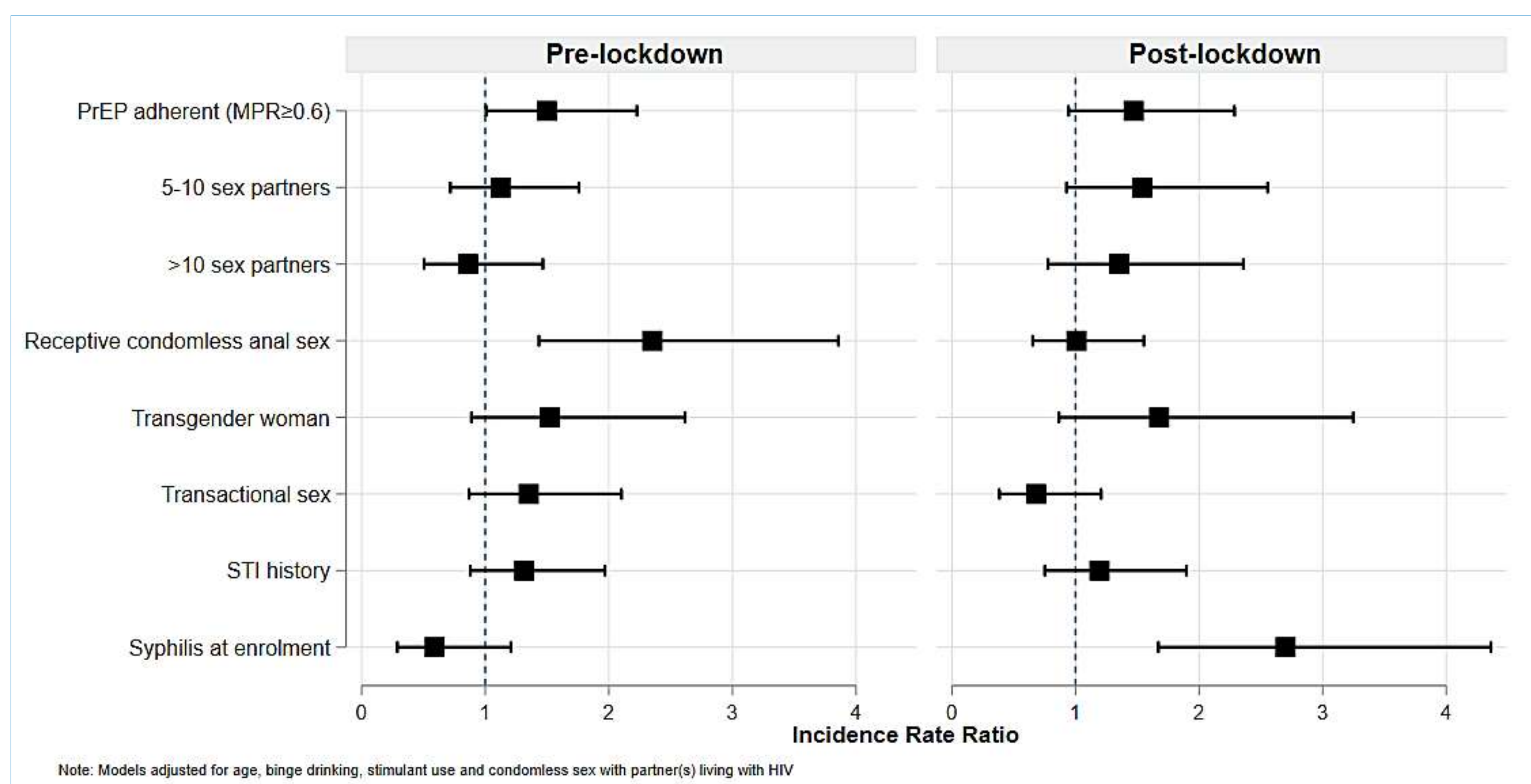
- Overall syphilis incidence was 9.1 (95%CI: 7.9-10.4)/100 person-years (p.y.) (205 syphilis cases in 185 participants).
- TW: 14.7 (10.5 - 20.1)/100 p.y.
- Cisgender-MSM: 8.3 (7.1 - 9.7)/100 p.y.
- Syphilis incidence was higher among PrEP-adherent participants (MPR ≥ 0.6) (IRR: 1.5 [IC: 1.1 - 2.0]), among TW (IRR: 1.6 [1.1 - 2.5]) and among those reporting condomless anal sex (IRR: 1.5 [1.1 - 2.1]).

Figure 1: Factors related to syphilis incidence among MSM/TW PrEP users



- Syphilis incidence was 10.0 (8.3-12.1)/100 p.y. and 8.1 (6.6-10.0)/100 p.y. before and during/after lockdown, respectively.
- Syphilis incidence was higher for participants reporting condomless anal sex (IRR: 2.4 [1.4 - 3.9]) before lockdown, and was higher among those with syphilis diagnosis at enrolment (IRR: 2.7 [1.7 - 4.4]) during/after lockdown.

Figure 2: Factors associated with syphilis incidence before and after lockdown due to the COVID-19 health emergency.

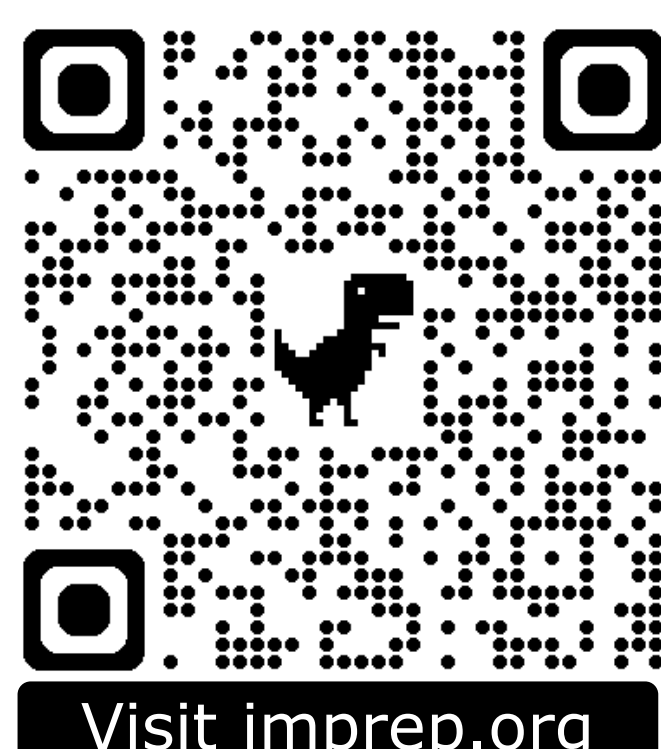


Conclusion:

- Syphilis incidence was high among PrEP-adherent MSM/TW, was strongly related to condomless sex and being TW. Health systems incorporating PrEP should reinforce the importance of periodical check-ups for those on PrEP, especially TW, who had a higher syphilis incidence compared to cis-gender MSM. Interventions to prevent STIs among TW using PrEP are needed and should be led by TW-focused services.

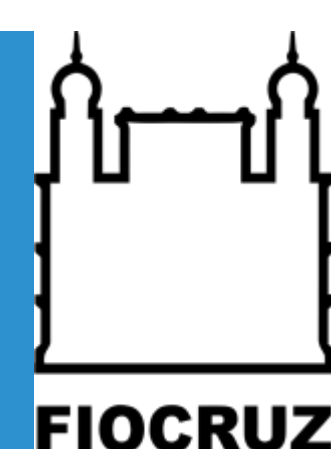


Download poster here



Visit imprep.org

Contact information: silver.vargas.r@upch.pe



UNIVERSIDAD PERUANA
CAYETANO HEREDIA
CENTRO DE INVESTIGACIÓN INTERDISCIPLINARIA EN
SEXUALIDAD, SIDA Y SOCIEDAD