

1272 Epidemiology of Bacterial STIs in MSM With or At Risk of HIV in the Region of Madrid (2021-2023)

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Background: We analyzed the epidemiology of bacterial STIs among MSM with HIV (MSM-WH) and those at risk of HIV (MSM-RH) in Madrid, evaluating associated risk factors.

Methods: This prospective study (2021–2023) included MSM-WH from the Spanish Network of AIDS Research Cohort (CoRIS) and those treated for HCV with DAAs in the Madrid Coinfection Registry (Madrid-CoRE). MSM-RH were recruited from PrEP users at a public STI clinic. Participants were assessed at baseline and follow-up (6 and 12 months). Sexual and substance use behaviors were evaluated at baseline, with STI screening (PCR for gonorrhea and chlamydia in pharyngeal, urethral, and rectal swabs, and syphilis serology) at each visit or when indicated. Baseline prevalence and follow-up incidence were stratified by HIV status, excluding prevalent cases from incidence analysis. Poisson regression was used to identify associations between sociodemographic and behavioral factors and STI counts during the study period (baseline and follow-up). Independent variables included age, country of origin, condomless anal sex (CLAX), chemsex, prior STI, and prior HCV, adjusted for cohort effects and observation time. Sensitivity analyses used logistic and Poisson regressions, separating prevalent and incident STIs.

Results: A total of 1,372 MSM participated (733 MSM-WH, 639 MSM-RH). MSM-WH were older (41 vs. 37 years), and 60% were native Spaniards. In total, 725 STIs were detected in 535 participants. Baseline prevalence and incidence rates are provided in the table. The STI prevalence ratio for MSM-WH versus MSM-RH was 0.85 (95% CI: 0.68-1.07), and the STI incidence rate ratio (IRR) was 0.79 (95% CI: 0.66-0.95). Significant risk factors for STIs included chemsex (adjusted IRR [95% CI] 1.392 [1.174–1.651]), CLAX (aIRR 1.372 [1.047–1.796]), prior syphilis (aIRR 1.318 [1.062–1.636]), and prior chlamydia (aIRR 1.306 [1.076–1.586]). Older age (aIRR 0.988 [0.979–0.996]) and being a native Spaniard (aIRR 0.787 [0.678–0.913]) were associated with lower STI risk. Sensitivity analyses confirmed these associations.

Conclusions: Both MSM-WH and MSM-RH exhibited high bacterial STI prevalence and incidence. Chemsex, CLAX, previous syphilis, and previous chlamydia infection were significant risk factors. STI screening and prevention strategies should prioritize these factors to reduce STI rates in MSM.