

# Don't forget about HIV-2: a cross-sectional descriptive study in Santo Domingo, Dominican Republic

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## INTRODUCTION

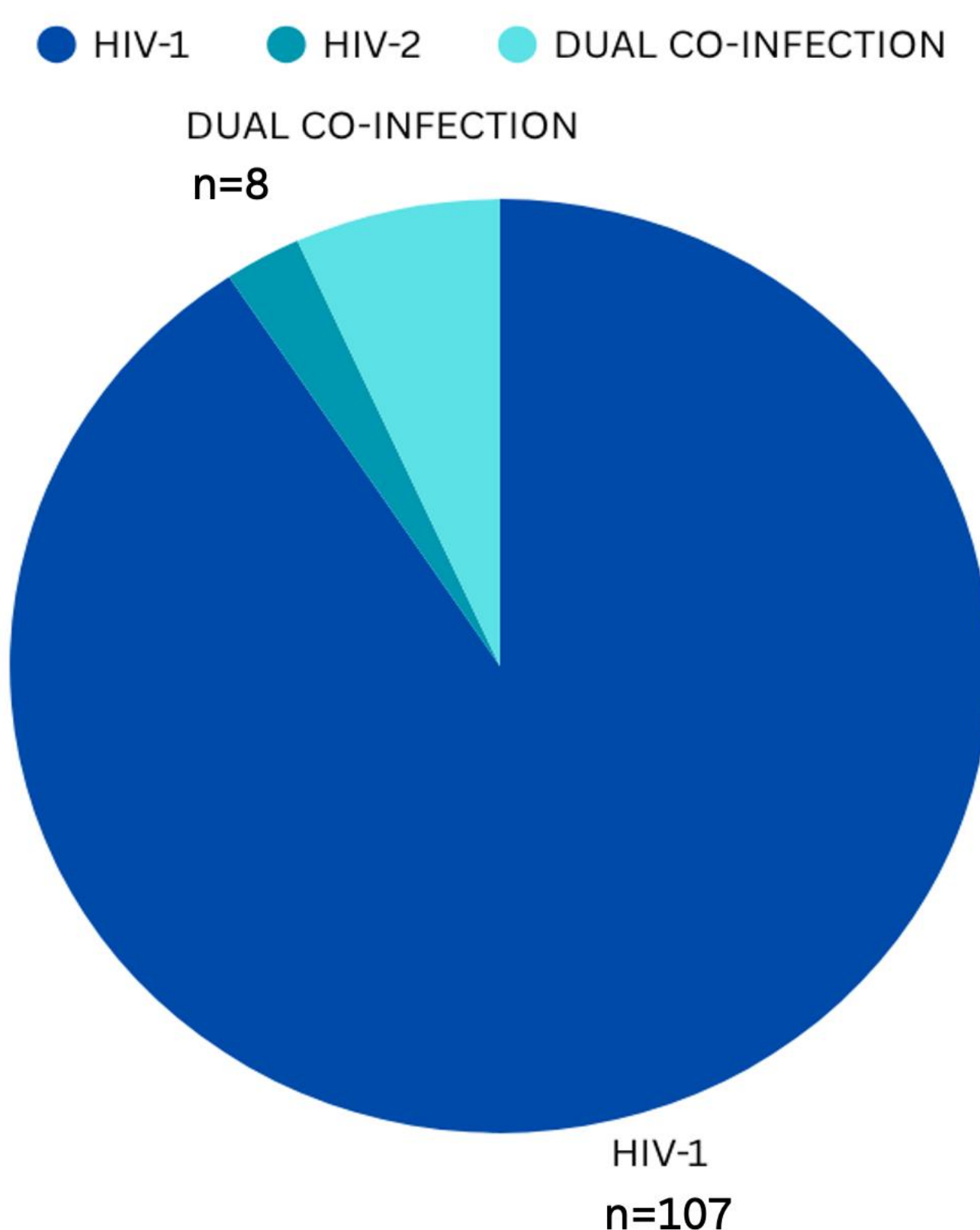
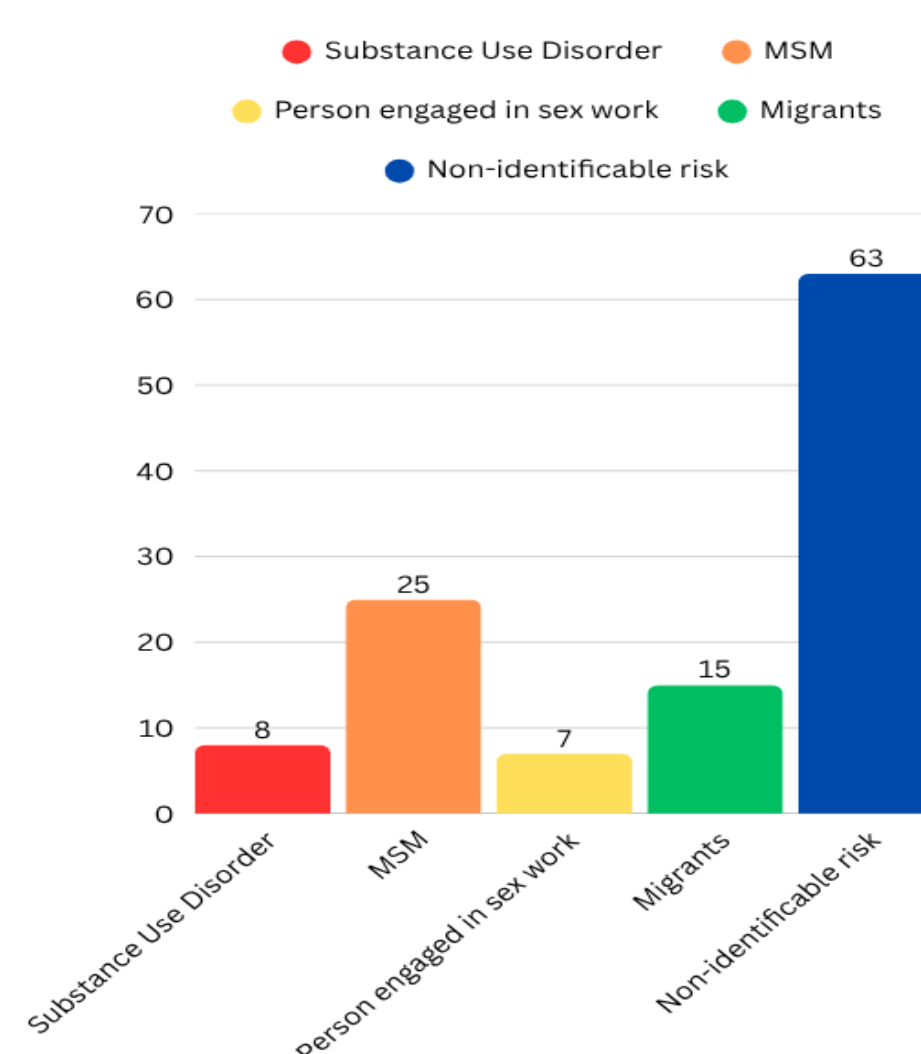
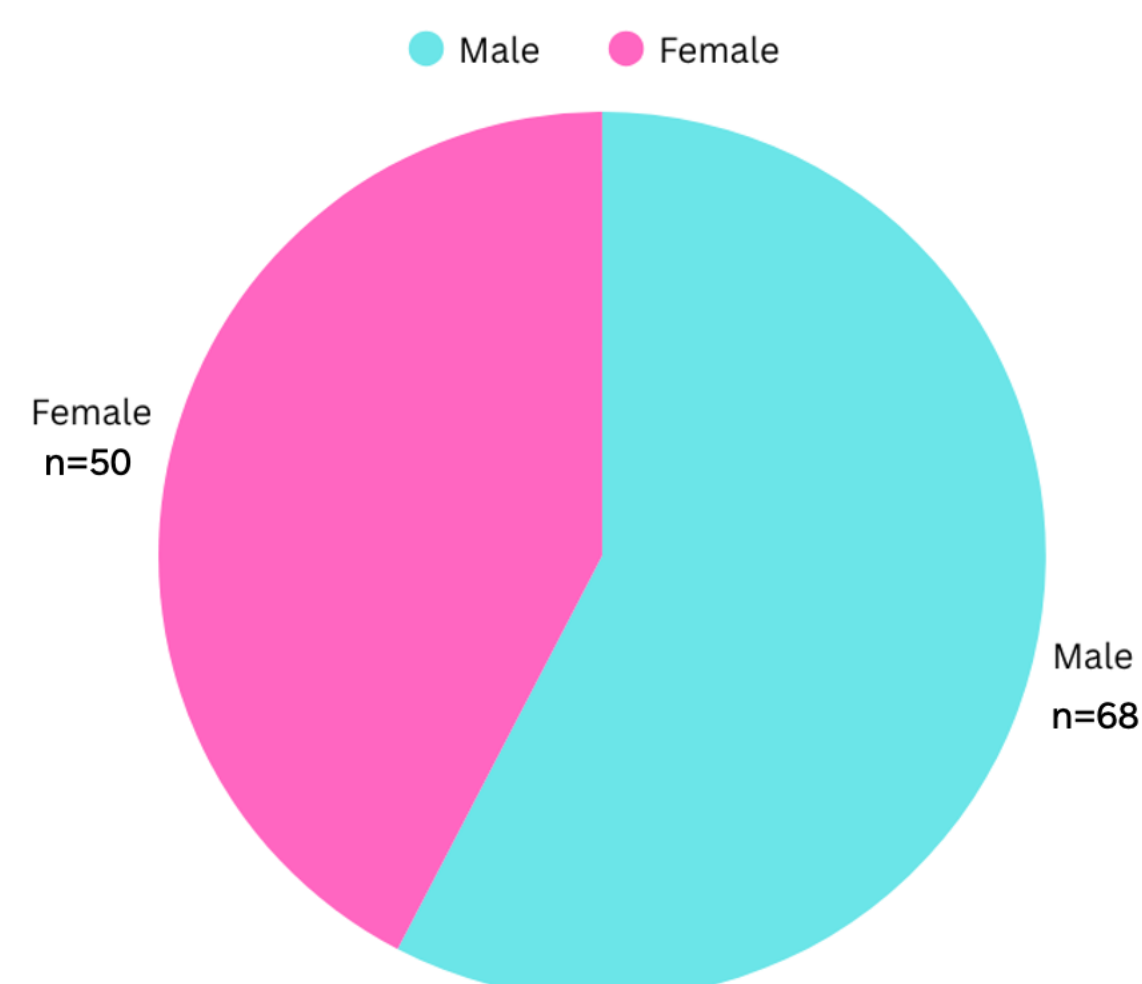
HIV-2 remains a neglected variant in Latin America and the Caribbean, where most surveillance and diagnostics focus exclusively on HIV-1. The Dominican Republic, as a migration and tourism hub, may be at risk of underdiagnosing HIV-2 cases. This study aimed to estimate the prevalence of HIV-2 and HIV-1/HIV-2 co-infection to support improved clinical management and surveillance strategies.

## METHODS

A cross-sectional study was conducted at a private HIV primary care clinic in Santo Domingo between June and July 2024. A total of 118 people with HIV (PWH) were recruited based on clinic attendance. Eligibility criteria included a confirmed HIV diagnosis and informed consent. Demographic data, key population classification, and recent CD4+ count and viral load were extracted from medical records. HIV-1 and HIV-2 serostatus was assessed using the CTK Biotech HIV 1/2 Ab Plus Combo Rapid Test, a lateral flow immunoassay with 100% reported sensitivity and specificity. No confirmatory molecular testing was performed. Descriptive analyses were conducted to estimate HIV-2 prevalence and associated clinical parameters.

## RESULTS

Of the 118 PWH, 68 (57.63%) were biological males, and 73.73% were under 46 years old. The majority (67.8%) had been diagnosed for over two years, and 94 (79.66%) had viral loads <20 copies/mL. CD4+ counts >200 cells/mm<sup>3</sup> were observed in 105 (88.98%). Key populations included immigrants (12.71%), sex workers (5.93%), MSM (21.19%), people who use drugs (6.78%), and individuals with no identifiable risk factors (53.39%). Rapid testing detected HIV-2 antibodies in 3 (2.54%) participants and HIV-1/HIV-2 co-infection in 8 (6.78%). Among these, 5 (45.45%) were biological females, and 6 (54.55%) had viral loads <20 copies/mL.



## CONCLUSION

The 9.3% prevalence of HIV-2 and HIV-1/HIV-2 co-infection in this cohort suggests ongoing transmission in the Dominican Republic. Given the absence of molecular confirmatory testing, these findings underscore the urgent need for expanded epidemiological surveillance, multi-center studies, and molecular diagnostics to improve case identification, clinical management, and public health interventions. Strengthened monitoring of HIV-2 is essential to track viral evolution, optimize treatment protocols, and inform prevention strategies in LAC. This study highlights the necessity for regional collaboration and investment in molecular epidemiology to address emerging HIV diversity in the Caribbean.

## References:

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