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1. Introduction

- GAT offers community-based, comprehensive prevention services (CPS) to people most at risk of acquiring HIV in the Lisbon Metropolitan Area. **GAT implemented an acute HIV infection (AHI) detection program in 2019.**
- AHI is the highly transmissible first stage of infection, defined as detection of HIV RNA or p24 antigen in the absence of HIV antibodies.
- Third-generation testing detects most HIV infections six weeks after transmission but cannot detect AHI. Point of care (POC) fourth-generation testing cannot reliably detect AHI. POC molecular testing is not yet considered by Portuguese HIV screening guidance.

2. Description

- Eligibility criteria for AHI screening at two testing sites fitted with HIV POC molecular testing were defined as (A) a nonreactive rapid HIV antibody test result, **AND** (B) recent high-risk exposure, defined as (B1) condomless/PrEPless vaginal/anal intercourse, **OR** (B2) sharing injecting materials, **OR** (B3) Chemsex in the last six weeks and after the HIV eclipse period (11 days), **AND** (C1) clinical presentation of AHI, defined as the presence of acute retroviral syndrome (ARS), **OR** (C2) an epidemiological link, defined as a sex/drug user partner diagnosed with HIV in the last six weeks.
- Qualitative HIV-1 NAAT POC testing (LOD of 350cp/ml) was performed upon consent.

3. Lessons Learned

- Of 41 people screened from February 2019 to May 2021, five (11.9%) were HIV positive.** All AHI cases were cisgender MSM, with a median age of 36 (23-53). Four were born in Brazil, one in Portugal.
- No cases were detected in those reporting epidemiological links. AHI prevalence was highest in those reporting Chemsex (33.3%), ARS (26.3%), and condomless/PrEPless intercourse (10.2%).

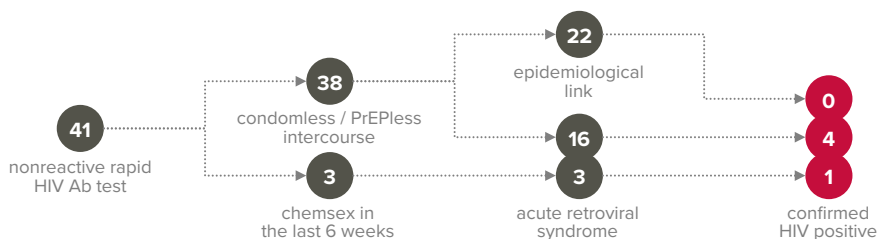


Figure 1. AHI screening eligibility criteria and results

4. Recommendations

- One in ten likely AHI cases was confirmed HIV positive. Support for community-based AHI detection is key to achieve scale and sustainability.

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