

ABSTRACT

BACKGROUND::

Febrile adults are usually not tested for acute HIV-1 infection (AHI) in Africa. We assessed a strategy to diagnose AHI among young adult patients seeking care.

METHODS::

Young adults (<30 years) who met predefined AHI criteria at care seeking, including fever, sexually transmitted disease symptoms, diarrhoea, body pains or multiple partners were referred from five pharmacies and screened at five health facilities. Prevalent HIV-1 was diagnosed by nationally recommended serial rapid HIV-1 testing. Willing HIV-1-negative patients were evaluated for AHI, defined as a positive p24 antigen test, and subsequent seroconversion or RNA detection. Febrile patients evaluated for AHI were also screened for malaria using a rapid test, with PCR confirmation of positives.

RESULTS::

In 3602 adults seeking care, overall HIV-1 prevalence was 3.9%: 7.6% (68/897) among patients meeting AHI criteria vs. 2.6% (71/2705) among those who did not ($P < 0.001$). AHI was diagnosed in 5 of 506 HIV-1-negative or discordant patients who met AHI risk criteria and were completely evaluated [prevalence 1.0%, 95% confidence interval (CI) 0.3-2.3%]. Of these 5 AHI cases, 4 were diagnosed among the 241 patients with fever (prevalence 1.7%, 95% CI 0.5-4.2%), vs. 1 among 265 non-febrile patients (prevalence 0.4%, 95% CI 0.0-2.0%, $P = 0.1$). Malaria was confirmed by PCR in 4 (1.7%) of the 241 febrile patients.

CONCLUSION::

AHI was as common as confirmed malaria in young febrile adults seeking care. An AHI detection strategy targeting young febrile adults seeking care at pharmacies and health facilities is feasible and should be considered as an HIV-prevention strategy in high-transmission settings. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 3.0 License, where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially. <http://creativecommons.org/licenses/by-nc-nd/3.0>.