## Evaluation of HIV-1/HIV-2 coinfection in febrile patients visiting health centers in Lagos, Nigeria.

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## **Abstract**

Acute febrile illnesses consistent with malaria are the most common presentation at health clinics in sub-Saharan Africa, accounting for 30-50% of outpatient visits. The symptoms of acute human immunodeficiency virus (HIV) infection can mimic acute malaria. Therefore it is necessary to evaluate patients presenting with malaria symptoms for HIV infection. Similarly, in order to ascertain the burden of HIV-2 in Nigeria, prevalence of HIV-1/HIV-2 co-infection was also evaluated among the cohort of febrile patients attending selected health centers in Lagos.

Cross-sectional study of 310 patients referred for malaria blood smears at each of four government health centers namely: Lagos Island general hospital, Shomolu health center, Orile Agege general hospital and Randle general hospital, Surulere were screened for HIV. The cohorts were 108 (34.8%) males and 202 (65.2%) females, patients ranged in age from 1 to 84 years.

HIV rapid antigen testing was performed on plasma samples of the febrile patients using a combination of Determine and Unigold kits. Tests were performed serially and confirmed by a third rapid diagnostic kit (SD-Bioline) that differentiates into HIV-1, HIV-2 or HIV-1/HIV-2.

Of the 310 patients evaluated, 9 (2.90%) had test results indicating HIV-1 infection, out of which 5(55.5%) were females and

4(44.4%) were males. There was no HIV-2 and neither was there any HIV-1/HIV-2 co-infection detected in this study.

These findings provide insights into a major opportunity for expanding recognition of early HIV infection in Nigeria. At multiple sites in Lagos, Nigeria, 1–3% of patients with suspected malaria had HIV infection.

## **Biography:**

Akinnusi Ololade is an assistant lecturer in the Department of Microbiology, University of Lagos, Nigeria, He recently concluded his masters and finished top of his class graduating in distinction with 4.58/5.0 CGPA. He is currently undergoing his PhD study in the University of Lagos, Department of Microbiology, research interests include virology, immunology and host-pathogen interaction.

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