

# Impact Of HIV Kit On HIV Testing: Observations From A Nigerian Teaching Hospital

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## Abstract

Sir,

Laboratory testing of patients for the Human Immunodeficiency Virus (HIV) infection is an important procedure that has a substantial impact on HIV diagnosis. As the knowledge of HIV infection is increasing, so also is the complexity of laboratory tests for its detection. The first HIV antibodies detection technique was licensed in 1985 by the Food and Drug Administration (FDA) in America and since then several kits have been produced and introduced into the world markets (1). When HIV antibodies technique was introduced many years ago, the World Health Organization (WHO) recommended that the double ELISA technique be adopted by developing countries before a patient can be said to be positive for HIV infection (2, 3). This was to avoid the false positive results often associated with these technologies. (First and second generation ELISA kits). As time went on, the government of Nigeria introduced immunoconfirmatory technique for better reliability of results.

The Aminu Kano Teaching Hospital, Kano, Nigeria introduced the immunoconfirmatory technology in May, 1998. Prior to this period, the double ELISA technology was used. We collated and compared laboratory test results and records for a period of seven months before and after the introduction of immunoconfirmatory technology. We observed that the cost per test increased from two hundred and fifty naira (2 dollars) to five hundred naira (4 dollars) following the introduction of immunoconfirmatory technology. There was however a reduction in the number of

patients from 289 to 258 over the two periods. The prevalence of reactive HIV antibodies however decreased from 43.6% to 36.8%. The drop in the number of patients who came for HIV antibody testing may be attributable to the doubling of the unit cost of HIV test from N250 naira (2 dollars) to five hundred naira (4 dollars). We also noted that the second period witnessed a reduction in the number of positive samples from a prevalence of 43.6% to 36.8%. It is possible that false positive results may have been recorded initially before the introduction of immunoconfirmatory tests. The drop in the number of patients who turned up for HIV testing may also contribute to the fall in prevalence in the latter period.

In conclusion therefore, even though patients may have paid more for HIV testing following the introduction of immunoconfirmatory technology, it is important to note that this technology has significantly improved the reliability of HIV test results, with better assurance and more confidence on HIV diagnosis. Health care providers and authorities in Nigeria and elsewhere in Africa are encouraged to introduce HIV immunoconfirmatory technology in their respective centers.

## References

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