The incidence of HIV among blood donors in Kaduna, Nigeria

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Transfusion transmissible infections are a very serious complication of blood transfusion. This is due to the long term morbidity and mortality associated with infectious agents such as Human Immunodeficiency Virus (HIV). HIV has continued to pose a great challenge to transfusion medicine, most especially in Africa due to a high transfusion demand.1,2

Since the discovery that HIV is transmitted through blood transfusion it became necessary to test all intending blood donors for HIV infection before they are bled to ensure the safety of all blood and blood products to the recipients.1 Nigeria with a HIV seroprevalence of 5% by 2004 has the third largest population of people living with HIV/AIDS in the world.3,4,5

We carried out this study to determine the incidence of HIV infection among all intending blood donors over a period of five years from January 2000 to December 2004 at the Kaduna Unit of the Ahmadu Bello University Teaching Hospital.

A total of six thousand and seventy nine (6079) donors were screened over the period with a mean of 1215 donors per year. There was an average of 34 HIV positive potential donors per year. The mean incidence of HIV per year was 2.8%. The incidence were 2.5, 2.9, 2.6, 3.1 and 2.9 for the years 2000 to 2004. The age group 31-40 had the highest incidence of 45.3% of the total HIV positive donors; this was followed by age group 21-30 with 39.5%. The donors 20 years and old or less had the lowest incidence of 5.2%.

The finding of an average incidence of 2.8% of HIV among apparently healthy blood donors in Kaduna Northern central Nigeria is comparatively lower than the incidence 3.8% found by Imoru et al in the northern city of Kano, Nigeria.6 While the findings 1% prevalence in Port Harcourt in South South of Nigeria by Ejele et al.7

Zachariah et al reported an HIV incidence of 22% among blood donors in Kampala Uganda in East Africa which is significantly higher than the Nigerian studies.8 An Indian study on a rural population in 2003 reported a HIV prevalence of 1.56% among blood donors.9

It is important to note that there is no decline in the trend of the incidence of HIV among blood donors in Kaduna, Nigeria over the years despite HIV/AIDS awareness programmes by both government and non-governmental organisation.10 There is thus a need to improve on our public enlightenment programmes, alleviate poverty and increase access to antiretroviral therapy.

References