

## The seroprevalence of Hepatitis B viral infection in HIV tested positive individuals seen in multi medical laboratory facilities in Owerri, Imo State, Nigeria

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### Abstract

**Introduction:** More than thirty years ago after the discovery of HIV/AIDS, demystifying the silent destroyer of immune system, has remained a scientific stinker. The contributions of hepatitis B and C co infection are becoming increasingly recognized. The prevalence of HIV/HBV co infection has been studied by many. In Lagos Nigeria, Odunukwe et al (2013) showed HBV prevalence of 10% in HIV patients. He also discovered that the commonest risk factor identified was heterosexual transmission. However, Nwolisa et al (2013) showed an overall prevalence of 5.8% with 8.2% and 3.8 % in females and males respectively among pediatrics HBV/HIV studied. Overall Adewole et al (2009) showed a national hepatitis B seroprevalence of 11.3% in monoinfected cases. HBV/HIV co-infection prevalence in Nigeria has been placed between 10- 70% (Ejele et al 2004, Nwokedi et al 2006, Iwalokun et al 2006 and Otegbayo et al 2008) Our study aimed at analyzing the seroprevalence of hepatitis B among HIV tested positive clients in multi medical laboratory facilities in Owerri, Imo state, Nigeria.

**Method:** A total of 300 HIV tested positive adults who were >18years and residing in Owerri were enrolled in this study. Participants were drawn from twenty (20) private laboratory services between January, 2013 and August, 2013.

**Sample collection and processing:** 2mls of blood from patients who tested positive for HIV were drawn after obtaining verbal informed consent, using a sterile syringe and needle. Samples were transferred into a universal glass container. These were adequately labeled and allowed to stand between 4-6 hours to obtain the sera. The sera were tested for hepatitis B surface antigen using HBs Ag Rapid test Kit (Atlas Link Biotech Co, ltd) according to the manufacturer's direction.

**Result:** Out of the three hundred (300) individuals who tested positive for HIV, thirty two (32) persons (10.6%) showed positive serology test for Hepatitis B in our series. Out of these persons, twenty one (21) (65.6%) were females while eleven (11) (34.4%) were males. Among the study population, persons aged 25-34.9 years had the highest prevalence of co infection (56.25%), while patients aged 60-69.9 years had the least prevalence. Males aged 35-44.9% had the highest prevalence. Majority of the females were secondary school holders (46.9%) who were self-employed and having multiple unprotected heterosexual lifestyles.

**Conclusions:** HIV and Hepatitis B viral infections share common route of transmission and they synergistically accelerate each progression. The increasing number of chronic liver diseases like cirrhosis among HIV infected individuals which have been demonstrated to be higher in HBV infected persons call for greater concern. Greater public health enlightenment in areas of health seeking behavior, safer sex practice, and overall health promotion must be intensified if reduction of this hepatitis B viral burden is to be achieved.

### Biography

Nwako Okechukwu Francis is a registrar in medicine department of Federal medical centre Owerri and a medical microbiologist with about 3 years teaching experience. He obtained B.Sc. in microbiology in 2001, MBBS in 2009, primary fellowship in 2010 and M.Sc. in medical microbiology in 2012. He has done some published work Nigeria. His on the job experience in the care and management of HIV positive clients in a resource poor setting ignited his interest in HIV medicine. His keen interest is in opportunistic infections in HIV/AIDS. He has applied to study Infection and Immunity in Ph.D in Nigeria. He is a member of NMA, associate fellow of WACP, associate fellow of NPMC. member NSM and NARD.