

TREND OF HBsAg SEROPREVALENCE AMONG BLOOD DONORS IN A NIGERIAN TEACHING HOSPITAL: A FIVE-YEAR RETROSPECTIVE STUDY

ABSTRACT

World Health Organization (WHO) classified Nigeria as a hyper-endemic hepatitis B surface antigen (HBsAg) positive nation with prevalence $\geq 8\%$. This study intends to add information that could strengthen established database to improve awareness and prevention of hepatitis B virus (HBV) infection. We aimed to evaluate seroprevalence and trend of HBsAg among blood donors in Olabisi Onabanjo University Teaching Hospital (OOUTH), Sagamu, Ogun State, Nigeria over a five-year period. Data from records of 7,102 individuals aged ≥ 20 years old who donated blood to blood bank in this hospital from January 2012 to December 2016 were analysed for gender, age, number of donors per year and HBsAg status. Data analysis was done with Statistical Package for Social Sciences software. $P \leq 0.05$ was considered statistically significant. Males were in the majority (6,547 [92.2%]). Age 30–39 years old was the major group (3,052 [43.0%]). Pooled HBsAg seroprevalence was 486 (6.8%). Females had the highest HBsAg seroprevalence across board with highest rate of 10 (19.6%) in year 2012 and pooled prevalence of 73 (13.2%). Age group of ≥ 50 years old had highest HBsAg seroprevalence 39 (8.5%) while age group of 20–29 years old had least 128 (5.8%). Stratified HBsAg positivity decreased steadily from year 2012 to year 2016. This location was HBV intermediate-endemic. There were age, gender and yearly seroprevalence of HBsAg related trends which could be leveraged upon in finding effective preventive measures against the disease. We recommend mass vaccination by government against HBV infection in addition to provision of sensitive blood investigational equipment.

Keywords: Trend, Seroprevalence, HBsAg, Blood donors, Teaching hospital