

Investigation of impact and spatial hematological variation among subjects infected with Hepatitis B virus in some Niger Delta communities

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The focus of the study was to investigate the impact and spatial hematological variations among subjects infected with Hepatitis B Virus in some Niger Delta Communities. A total of 1000 subjects of age ≥ 15 were recruited through convenience random sampling research design. Three milliliters of whole venous blood were collected from the antecubital vein of each subject and was dispensed into an Ethyl Diamine Tetra Acetic Acid (EDTA) bottle. The blood was used to screen for the presence of surface antigen of Hepatitis B virus and also, the Packed Cell Volume (PCV), Hemoglobin (Hb) and White Blood Cell (WBC) count was determined using standard laboratory diagnostics techniques. The result of the study recorded 14% prevalence rate of HBsAg among the screened subjects; 40.7% of which were males and 59.3% were females. The mean WBC count of the sero-positive subjects was $8.73 \times 10^8/l$ while that of the negative subjects was $6.37 \times 10^8/l$, the mean Haemoglobin (Hb) value of the infected subjects was 10.48 g/dl, while that of the non-infected subjects was 11.54 g/dl, even as the mean PCV of

the sero-positive subjects was 31.56% while that of the sero-negative subjects was 34.62%. The frequency of occurrence of HBsAg among the different age groups showed that the age group of 25-34 recorded a higher percentage of HBsAg infection with 34.3%; while age group of 45-54 recorded the least with 9.3% respectively. The need for continuous robust health awareness campaign, especially in the rural communities will be helpful towards reducing the trend, even as the provision of functional health care facility with modern laboratory diagnostic tools would also facilitate prompt diagnosis and treatment of the infection in the limited resource regions of the world.

Speaker Biography

Obioma Azuonwu works in the department of medical laboratory science and is a faculty of science at Rivers State University of Science and Technology located at Nkpolu, Port Harcourt, Nigeria. His research interests are in the healthcare and its allied regions.

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