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Seroprevalence of Hepatitis B and C among Healthcare Workers in Dutse Metropolis, Jigawa State, Nigeria

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Abstract: Hepatitis is one of the neglected infectious diseases in sub Saharan Africa, and most of the available data is based on blood donors. Health care workers (HCWs) often get infected as a result of their close contact with patients. A crosssectional study was conducted to determine the prevalence of hepatitis B and C among this group of professionals with a view to improving the quality of care to their patients. Hepatitis B and C infections pose a major public health problem worldwide. While infection is highest in the developing world particularly Asia and sub-Saharan Africa, healthcare workers are at higher risk of acquiring blood-borne viral infections, particularly Hepatitis B and C which are mostly asymptomatic. This study was aimed at determining the prevalence of Hepatitis B and C infections and associated risk factors among health care workers in Dutse Metropolis, Jigawa State - Nigeria. A standard rapid immuno-chromatographic technique i.e. rapid ELISA was used to screen all sera for Hepatitis B surface antigen (HBsAg) and Hepatitis C viral antibody (HCVAb) respectively. Strips containing coated antibodies and antigens to HBV and HCV respectively were removed from the foil. Strips were labeled according to samples. Using a separate disposable pipette, 2 drops of the sample (plasma) were added into each test strip and allowed to run across the absorbent pad. Results were read after 15 minutes. The prevalence of HBV and HCV infection in 100 healthcare workers was determined by testing the plasma collected from the clients during their normal checkup using HBsAg and HCVAb test strips. Results were subjected to statistical analysis using chi-square test. The prevalence of HBV among HCWs was 19 out of 100 (19.0%) and that of HCV was 5 out of 100 (5.0%) where in both cases, higher prevalence was observed among female nurses. It was also observed that all HCV positive cases were recorded among nurses only. The study revealed that nurses are at greater risk of contracting HBV and HCV due to their frequent contact with patients. It is therefore recommended that effective vaccination and other infection control measures be encouraged among healthcare workers.

Keywords: prevalence, hepatitis, viruses, healthcare workers, infection

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