

INCIDENCE OF HEPATITIS B AND C INFECTIONS AMONG PREGNANT WOMEN IN IMO STATE, NIGERIA

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ABSTRACT

Infections due to Hepatitis B and C viruses are significant health problems around the globe, Nigeria inclusive. This study was conducted among 200 pregnant women receiving ante-natal care in Federal Medical Centre, Owerri, Imo State, Nigeria to determine the sero-prevalence of Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) and to determine whether liver aminotransferases can be affected. The blood samples were tested for hepatitis B surface antigen (HBsAg) and Anti-HCV using HBsAg and Anti-HCV one step rapid test strip and furthermore using ELISA technique. Serum alanine aminotransferase (ALT) and serum aspartate aminotransferase (AST) activities were also estimated in all the subjects using Reitman-Frankel method. The results showed that 14% and 3% of the 200 blood samples tested positive for HBV and HCV respectively. The mean AST levels for HBsAg negative and positive subjects were 8.64 ± 2.56 and 10.10 ± 1.33 respectively while the mean ALT levels were 3.21 ± 2.72 and 8.45 ± 4.08 respectively. The mean AST for anti-HCV negative and positive subjects were 10.67 ± 2.38 and 9.00 ± 0.00 respectively while the ALT were 5.71 ± 2.09 and 4.00 ± 0.00 respectively. There was significant increase in the levels of ALT between the HBsAg positive and negative pregnant subjects ($P < 0.05$). HBV and HCV infection can be present in pregnant women and can alter liver aminotransferases. Therefore testing for HBsAg and Anti-HCV is recommended for all pregnant women at first prenatal and postnatal visit so that HBsAg and HCV positive mothers will receive prompt intervention.

Keywords: Health problems, sero-prevalence, pregnant women, aminotransferases, significant, intervention

INTRODUCTION

Hepatitis B virus (HBV) is a DNA virus of the family *hepadnaviridae* and the causative agent of hepatitis B infection (Pungpapong *et al.*, 2007). It is 50 - 100 times more infectious than HIV and 10 times more infectious than hepatitis C virus (HCV). Many carriers do not realize they are infected with the virus, thus it is referred to as a "silent killer" (Samuel *et al.*, 2004). The minimum infectious dose is so low that such practices like sharing a tooth brush or a razor blade can transmit infection (Chang, 2008). HBV also shares similar routes of transmission with HIV (Willey *et al.*, 2008).