

**Background:**

The study was conducted at Arua regional referral hospital on pregnant women who were attending antenatal services with the aim of determining prevalence and selected risk factors associated with hepatitis B infections from July to August 2015.

**Methodology:**

Blood samples were collected from the participants and tested for HBsAg antibodies using specific HBsAg test strips [plasmatec] and those tested positive were retested using ELISA [Murex] for confirmation. Results Out of 140 pregnant women who participated in the study, 12 (8.6%) tested positive and 128 (92.4%) tested negative. None of the selected risk factors; age, level of education and knowledge of pregnant women towards hepatitis B infections all did not show positive significance towards hepatitis B sero-status as all their p-values were  $> 0.05$  and to consider a given risk factor to show positive significance p-values was considered to be  $< 0.05$  at 95% Confidence Interval.

Participants were categorized in age group as 15 – 25 with total of 79 (56.4%) of these 9 (11.4%) tested positive and 70 (88.6%) tested negative, 26 – 35 with total of 49 (35%) of these 3 (6.1%) tested positive and 46 (93.9%) tested negative and 36 – 45 with total of 12 (8.6%) of these none tested positive and 12 (100%) tested negative and the study results reveal a non-significant positive relationship ( $r = 0.121$ ,  $P = 0.155$ ) between hepatitis B sero status and age.

In assessing the levels of education , 15 (10.7%) did not attend formal education and of these 2 (13.3%) tested positive and 13 (86.7%) tested negative, 59 (42.1%) attended primary education and of these 5(8.5%) tested positive and 54 (91.5%) tested negative, 43 (30.7%) attended secondary education and of these 2 (4.7%) tested positive and 41 (95.3%) tested negative, 20 (14.3%) attended tertiary education and of these 2 (10%) tested positive and 18 (90%) tested negative and 3 (2.1%) were students of these 1(33.3%) tested positive and 2 (66.7%) tested negative and the results indicate a non-significant positive relationship ( $r = 0.007$ ,  $P = 0.938$ ) between hepatitis B sero status and level of education. Participants' knowledge were also assessed where 51 (36.4%) did not have any knowledge at all and of these 4 (7.8%) tested positive and 47 (92.2%) tested negative, 53 (37.9%) had scanty knowledge and of these 3 (5.7%) tested positive and 50 (94.3%) tested negative and 36 (25.7%) had adequate knowledge and of these 5 (13.9%) tested positive and 31 (86.1%) tested negative and the findings showed a non-significant positive relationship ( $r = -0.074$ ,  $P = 0.388$ ) between hepatitis B sero status and Knowledge on Hepatitis B infection.

**Conclusion:**

The prevalence of hepatitis B among pregnant women attending antenatal services at Arua Regional Referral Hospital is high (8.6%) with age group 15 – 25 mostly affected and high in participants who

did not attend formal education and those who attended primary education as the highest education level. Therefore as a recommendation, pregnant women should be screened for hepatitis BsAg antibodies and routine sensitization of the pregnant women about hepatitis B infections to continue during antenatal visits at Arua Regional Referral Hospital.