ORIGINAL RESEARCH ARTICLE

An Assessment of the Clinical Utility of Routine Antenatal Screening of Pregnant Women at First Clinic Attendance for Haemoglobin Genotypes, Haematocrit, ABO and Rh Blood Groups in Port Harcourt, Nigeria

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Abstract

This prospective study was designed to provide the frequencies of the haemoglobin genotypes, ABO and Rh blood groups and their effects on the haematocrit values among pregnant women in Port Harcourt. One hundred and eighty (180) pregnant women at their first clinic attendance and in their first pregnancy (parity - 0) participated in this study. The overall frequencies obtained for ABO and Rh blood groups were: 26.67% for group A, 18.33% for B, 2.22% for AB and 52.78% for O. Rh D positive was 95.56% while Rh D negative was 4.44%. The frequencies of haemoglobin genotypes were 70.00% for HbAA, 29.44% for HbAS and 0.56% for HbSS. HbAC and SC did not occur in this study population. The mean haematocrit value was 34.64%. This was found to be independent of the ABO and Rh blood groups (P>0.05). On the other hand, haemoglobin genotypes were found to exert significant effects on the haematocrit values (F = 8.01, P = 0.0005). No significant relationship was found to exist between age and the haematocrit values. (F = 0.91, P > 0.05). Since pregnancy in sickle cell disease is associated with morbidity, proper antenatal monitoring and counselling will be necessary to prevent fatal outcomes. (*Afr J Reprod Health* 2005; 9[3]:112-117)

Keywords: Antenatal, pregnant women, Haemoglobin genotypes, ABO, Rb, blood groups, Heamatocrit

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