

The impact of anaemia and malaria parasite infection in pregnant women- Nigerian perspective

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Malaria and anaemia during pregnancy is still a major health problem in endemic countries with clinical consequences including death of both mother and child. In Nigeria, statistics shows that as many as 300,000 lives especially those of children and pregnant women are lost annually due to malaria. This study was aimed at assessing the impact of malaria and anaemia among pregnant women living in Calabar South Local Government Area of Cross River State, Nigeria, which is characterized by unstable transmission of malaria. A total of 664 subjects were enrolled in the study made up of 414 pregnant women attending antenatal clinic in the University of Calabar Teaching Hospital Calabar, Nigeria and 250 age-matched non-pregnant women served as control group. Full blood count was done using PCE-210 automatic cell counter, malaria parasite detection was through examination of peripheral blood smears and malaria parasite count/density was done using WHO standard method (WHO, 1991). Anaemia was significantly ($P < 0.05$) higher among the pregnant women 253 (61.1) ($Hb < 11$ g/dl) than in the non-pregnant women 96 (38.3%) ($Hb < 12$ g/dl). The prevalence of malaria parasite infection was 290 (70.1%) in pregnant women and 152 (60.8%) in the control group. Prevalence of anaemia and malaria parasite was found to be higher in the primigravidae than in the multigravidae. Primigravidae were more susceptible to the parasite especially *Plasmodium falciparum* with mean parasite density of 1962.50 ± 220.90 (parasite/ μ l) than the multigravidas with parasite density 446.70 ± 296.90 (parasite/ μ l). Malaria parasite density increased significantly with gestational age but anaemia was more prevalent in the second trimester than in the other trimesters. There was a negative correlation between haemoglobin and malaria parasite density in both pregnant and non-pregnant women ($r = -0.1964$). The results showed that malaria infection caused by *P. falciparum* had serious effect on pregnant women living in the study area. Malaria in pregnancy should be recognized as a global priority in health care services. The study advocates the need for pregnant women to undergo routine haemoglobin estimation and early malaria prophylaxis considering the deleterious effects of anaemia on them and their foetus.

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