Impact of malaria on immunohaematological parameters of pregnant women infected with malaria parasites at Federal Teaching Hospital Abakaliki, Ebonyi State

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In endemic regions of sub-Saharan Africa, malaria during pregnancy is a major public health concern and has important consequences on birth outcome. There are extensive and delicate alterations in the immunohaematological parameters of pregnant women infected with malaria parasites. This work is designed to ascertain the impact of malaria on immunohaematological parameters of pregnant women infected with malaria visiting Federal Teaching Hospital Abakaliki. Out of the 1,500 pregnant women screened for malaria, 660 (44.0%) were positive for malaria parasite. Of the 44.0% pregnant women positive for malaria parasite, the age range of 26-30 years (31.8%) were more infected with malaria parasite, followed by 21-25 years (22.7%), while 41-45 (4.4%) years were the least infected. Pregnant women with no formal education were most infected (36.4%), followed by primary education (27.3%), while secondary education showed the lowest rate of malaria in pregnancy (13.6%). Housewives (29.5%) reported the highest cases of malaria in pregnancy, while students reported the lowest (9.2%). Married women showed the highest cases of malaria in pregnancy (79.5%), while widow reported the lowest (2.3%). Christian reported in the highest cases of pregnancy in malaria (75.0%) and Muslim the least (25.0%). The mean values of the immunohaematological parameters of pregnant women with respect to parasitaemia were haemoglobin (9.78±37.45 g/dL), packed cell volume (31.56±2721.14 %), white blood count (8.58±50.06x10^3/mm^2), neutrophils (57.96±1004.97%), Lymphocyte (28.24±1392.97%), mesophils (7.28±110.49%), eosinophils (3.62±1156.91%) and platelets (141.88±133873.07x10^9/l). This study have shown that the adverse consequences of malaria in pregnancy has great impact on immunohaematological parameters which may affect not only the neonate and infant but also increase the risk of non communicable diseases when the child grows into an adult and the risk of low birth weight in the next generation.

Biography

Moses Nnaemeka Alo studied Microbiology (BSc) from University of Lagos, Nigeria and did Masters Degree (MSc) in Medical Immunology from Ebonyi State University, Nigeria and also obtained a PhD in Medical Microbiology from Ebonyi State University, Nigeria. He also has a professional qualification in Medical Microbiology registrable with Medical Registration Council of Nigeria. His research areas include infectious diseases, public health, immunology and medical bacteriology and virology. He has been the Head of Department of Medical Laboratory Science from 2007-2011 at Ebonyi State University, Nigeria, member Medical Laboratory Science of Nigeria, and currently is the program coordinator Microbiology in Federal University Ndufu-Alike Ikwo, Nigeria. He is involved in various researches both at undergraduate and postgraduate level. He is currently a research coordinator in Microbiology and Epidemiology of Water Borne Infectious Disease in Federal University Ndufu-Alike Ikwo, Nigeria. He has over 50 publications to his credit.