



Prevalence of *Plasmodium Falciparum* amongst pregnant women in Enugu State; A case study in Enugu Teaching Hospital Parklane, Enugu State

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A single-celled protozoan parasite of the genus *Plasmodium* that causes malaria is transmitted by female *Anopheles* mosquitoes during a blood meal. In regions with high *Plasmodium falciparum* transmission and high levels of acquired immunity, women are vulnerable to asymptomatic infection, which can cause maternal anemia, placental parasitaemia, spontaneous abortion, stillbirth, preterm, and low birth weight. The aim of this study is to determine the prevalence of malaria (*Plasmodium falciparum*) among pregnant women attending the antenatal clinic in Enugu Teaching Hospital, Parklane Enugu State. One hundred and seventy-two (172) confirmed pregnant women were investigated in total, one hundred and fifty-two (152) samples tested positive to the RDT test (88.4%), whereas twenty (20) samples tested negative (11.6%). For the positive samples, further tests including a microscopic parasite test for malaria, a packed cell volume (PCV) analysis, and a white blood cell count were carried out. The result shows that out of one hundred and fifty-two positive (152) samples, fifty-nine (59) samples (38.8%) were in their first trimester, sixty-seven (67) patients (44.1%) were in their second trimester and twenty-six (26) patients (17.1%) were in their third trimester. According to the findings, women had a high parasite density burden in their second trimester (44.1%), first trimester (38.8%), and third trimester (17.1%), in that order. The null hypothesis in this study asserts that there is no significant association between gestational age and the prevalent burden of malaria, which is why $0.414 > 0.05$. Additionally, there is no correlation between gestational age and packed cell volume; hence, $0.00 < 0.05$. The provision of insecticide-treated bed nets, regular screening and treatment, and intermittent preventative therapy can all help reduce the disease's morbidity. We can enhance mother and child health outcomes and reach the maternal health-related sustainable development objective by tackling the issue of malaria among pregnant women.

Keywords: *Plasmodium falciparum*, pregnant women, malaria prevalence, gestational age, antenatal clinic (Enugu).
