

Comparison of three diagnostic method for identification of malaria parasite in pregnant women attending antinatal care using histidine rich protein 2 (hrp2-rdt), rapid diagnosstic test kit, parasite lactate dehydrogenes kits (pldh) and microscopy

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Abstract

Malaria infection in pregnancy is a major public health problem which poses serious life threat to pregnant women than their fetuses. Accurate diagnosis and prompt treatment of pregnancy women are important in preventing adverse pregnancy outcomes. This study compared the diagnostic performance of two rapid diagnostic test kits (Histidine Rich Protein 2 HRP2 and Parasite Lactate Dehydrogenase pLDH) and Gold Standard Microscopy in pregnant women. HRP2 Result were taken after 15mins. An indication of a positive result will show the double line on both the control point and on the test point, while negative result indicate a single line at the control point. While pLDH Results were taken after 20mins an plasmodium falciparum indication of double line in the control point "C" and plasmodium falciparum (Pf) indicates positive plasmodium falciparum while if there is double line in both control point and plasmodium vivax (Pv) an indication of a positive plasmodium vivax, while an indication of three line in control point, plasmodium falciparum and plasmodium vivax indicates positive plasmodium falciparum and plasmodium vivax, indication of one line at the control point indicates negative while indication at the of the sample half way of the control point without getting to the band of plasmodium falciparum indicates an invalid result. 80 blood samples of pregnant women were collected from Sir Yahaya Memorial Hospital Brinin Kebbi, Kebbi State and screened for malaria parasite by HRP2, pLDH and Microscopy.



from the result of microscopy shows that 6 were positive and 74 were negative representing 7.5% and 92.5%. From the above result presented microscopy remains one of the Gold Standard for malaria diagnostic test but there's labor intensive and it requires significant skills and time. Thus, this study was



conducted in search of prompt, reliable and good alternative method in malaria diagnosis.

Biography:

Obi Chidiebere, he is from Nigeria. He is a lecturer in the Department of Microbiology, Federal University Birnin Kebbi, Kebbi State, Nigeria. He has completed MSc and his MSC research work centered on evaluation of the efficacy of commonly used disinfectants on clinical isolates isolated from the operating theater of a tertiary healthcare as a means of controlling medically important bacteria causing nosocomial infections. He has several publications to his credit.

Speaker Publications:

1. "Knowledge of HPV, HPV-induced cancers, and HPV vaccine among university students in medical laboratory science disciplines: Nigerian study"
2. "Interrogational torture as an abuse of human rights in the fight against terrorism in Nigeria: an ethical evaluation"
3. "Knowledge of HPV, HPV-Induced Cancers, and HPV Vaccine among a Sample of Freshmen in a Northwestern Nigeria Monotechnic"

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