



## International Malaria Colloquium: Meeting Abstracts Applying Molecular Techniques to Interventions in Malaria Elimination in Nigeria

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### **Congenital malaria and viral infections among mothers and their new born babies in UPTH**

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**Introduction:** Malaria and viral infections are of primary concern to public health particularly in pregnancy because of the risk of transmission to the foetus. Several infections have been demonstrated to be transmitted from the mother to the child

either during pregnancy or at the time of delivery through the birth canal<sup>1</sup>. Malaria in pregnancy have been implicated in low birthweight, increased infant and maternal





mortality. Reports have shown that an estimated 6% of infant deaths in areas of malaria endemicity is attributed to malaria infection during the child's prenatal life<sup>2</sup>. Co-infection of malaria with viral infections such as HIV predisposes the pregnant woman to increased risk of anaemia, preterm birth and growth retardation in the foetus<sup>3</sup>.

**Methodology:** Study was conducted in postpartum women in University of Port Harcourt Teaching Hospital. Venous blood was collected from 103 mothers and from the umbilical cord of their babies. Blood smears were stained with Giemsa and diagnosis of malaria was done by microscopy. Sera extracted from the blood samples were analysed for the presence of HCV and HbsAg antibodies using ELISA techniques and double ELISA techniques for the presence of HIV 1 and 2. Transmission of the infections was evaluated based on the presence of the

pathogens in cord blood of the new born babies.

**Results:** Evaluation of the results showed as follows: Malaria parasites were found present in all the mothers (100%), HIV (7.7%), HbsAg (1.9%) and HCV (0.97%) respectively. Transmission for malaria parasite was 96%, HIV (62.5%) and there were no transmission for the HBV and HCV antibodies.

**Conclusion:** The results of the study reveal a very high transmission of malaria and HIV from mother to child. There is a great need for increased awareness and enforcement PMTCT and IPTp in the study area.

**Key words:** Malaria, mothers, new-born babies, viral infections.

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