Africa (CANTAM), West Africa (WANETAM), and Southern Africa (TESA).

PO 8289 ASSOCIATION BETWEEN PLASMA LEVELS OF IL-27, IL-6 CYTOKINES AND *P. FALCIPARUM* INFECTION IN PREGNANT WOMEN LIVING IN MBALMAYO, CAMEROON

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10.1136/bmjgh-2019-EDC.68

Background The appropriate balance between anti-inflammatory and pro-inflammatory cytokines is necessary for protection against pregnancy-associated malaria and poor pregnancy outcomes. This study therefore aims to investigate the relationship between plasma levels of some regulatory cytokines and *P. falciparum* infection in Cameroonian women during pregnancy.

Methods Peripheral blood was collected from 131 women during pregnancy and 27 non-pregnant women living in the Mbalmayo area between May and December 2014. Parasitaemia was determined by microscopy and haemoglobin level using a haematological counter. Plasma levels of IL-27 and IL-6 cytokines were measured using the Magnetic Luminex Screening Assay technique.

Results Parasitaemia associated negatively with haemoglobin level (r_s=–0.43; p<0.001). The plasma level of IL-6 was higher in pregnant women than in non-pregnant women (p=0.05). Regarding parasitaemia, plasma level of IL-27 was significantly higher in non-infected than in infected women (p=0.028) while that of IL-6 was significantly higher in infected women (p<0.0001). Moreover, parasitaemia correlated negatively with the plasma level of IL-27 (p=0.034) and positively with that of IL-6 (p<0.0001). In addition, level of IL-6 was significantly higher in anaemia-positive than in anaemia-negative women (p=0.028). On the other hand, level of IL-27 negatively associated with the parity (p=0.022) and gestation age (p=0.014).

Conclusion These results show that in pregnant women, *P. falciparum* malaria infection is associated with high plasma level of IL-6 and low level of IL-27, suggesting that IL-27 could have a protective effect against pregnancy-associated malaria while IL-6 seem to be a potential biomarker of the disease.

PO 8290 INFLUENCE OF THE SICKLE CELL TRAIT ON *PLASMODIUM FALCIPARUM* TRANSMISSION IN ASYMPTOMATIC CHILDREN

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10.1136/bmjgh-2019-EDC.69

Background The sickle cell trait is associated with protection against severe malaria. Recently, it has been shown that the genetic protection conferred by the sickle cell trait has no effect on the transmission of *Plasmodium* species from humans to vectors. Our study aimed to investigate the putative association between the sickle cell trait AS and the susceptibility to malaria infection of both the human host and the insect vector.

Methods The study was conducted from June to November 2017 among asymptomatic children living in Cameroon. The samples were collected on microscopy slides, Whatman FTA and grade 17 paper for the selection of gametocyte carriers by microscopy, the molecular diagnosis of *Plasmodium* species, and sickle cell trait (PCR- RFLP), respectively. Infectivity of the mosquito was measured by experimental infections on gametocyte-containing blood from naturally infected carrier. Genetic diversity was measured using microsatellite markers.

Results A total of 1557 children were recruited; the prevalence of *Plasmodium* infection among this group was 58% and the AS sickle cell trait 20%. No significant difference in the prevalence of *P. falciparum* infection was observed according to the sickle cell trait carriage and this irrespective of the parasite stage (p>0.05). The level of infectivity of the mosquito was higher when feedings were performed on blood from HbAS genotypes compared to HbAA genotype blood, and the difference was even more significant when the blood pellet was resuspended with non-immune AB plasma (p<0.0001). No significant difference was observed in the infection complexity between HbAS and HbAA genotypes (p>0.05).

Conclusion *Plasmodium* infection is not influenced by HbAS genotype regardless of parasite stage; the risk of anopheles infection is higher with blood from gametocyte carriers with sickle cell trait (HbAS). The sickle cell trait does not affect the multiplicity of infection.

PO 8296 REDUCING LOSS TO FOLLOW-UP OF CHILDREN EXPOSED TO HIV IN THE PROVINCES OF MANICA AND SOFALA, CENTER OF MOZAMBIQUE

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10.1136/bmjgh-2019-EDC.70

Background Early childhood diagnosis of HIV is a challenge in many developing countries, including Mozambique. Approximately 50% of exposed children and HIV-positive are lost to follow-up, i.e. during Postpartum Consultation (CPP), at-risk child consultation (CCR) or ART consultation in the country. The objective was to carry out an intervention to reduce the loss to follow-up of children exposed to and positive for HIV in Manica and Sofala provinces.

Methods Intervention study in HIV-positive women and their children in CPP and CCR in six health facilities in 2016. Stepped-wedge design with 3 cohorts for 3 months of two health facilities randomly selected. Interventions included activist allocation, telephone calls to contact the mothers, guide the mothers with exposed child from CPP to CCR, active outreach to missed mothers, and initiation of ART in the CCR for 3 months. Data were collected from the health facilities and study books. Analysis was binomial logistic regression model with mixed effects.

Results Of the aggregated data, PCR +was 7.7%, and proportion of HIV-positive women in CPP 17.4%. In the control group only 24% of the mothers had more than 2 visits with