

**The Determinants of Usage of Intermittent Preventive Therapy and Insecticide-treated Bed
nets in Pregnancy in Juba, Southern Sudan**

Robert Patrick Napoleon Abias

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ABSTRACT

Southern Sudan lies in areas of high malaria transmission where pregnant women are at a greater risk of malaria infection, especially from the most severe form caused by *Plasmodium falciparum*, which can cause maternal or foetal complications. The disease is a leading cause of maternal mortality. According to WHO recommendations, the Ministry of Health (MOH) of the Government of Southern Sudan has adopted the treatment of clinical malaria, use of insecticide treated nets (ITN's) and intermittent presumptive therapy (IPT) to reduce the burden of malaria in pregnancy. To date there is no dearth on ITN and IPT use in pregnancy in Southern Sudan. This study sought to determine the adherence of pregnant women using ITNs and IPT and factors that affect their use in Juba Teaching Hospital. A facility-based cross-sectional study was conducted in Juba Teaching Hospital in 2009. The study participants were recruited from women in their second or third trimesters who came for ANC services and those women in the post delivery period. Using a semi-structured questionnaire, 334 study participants were enrolled by systematic random sampling technique. The data was analyzed using *Epi info* version 3.5.1(2008). The overall IPT usage among the participants was 61%, and ITN usage was 87%. Participants who made three or more ANC visits were four times more likely to use IPT than those who made fewer visits ($p < 0.05$), while those who used indoor residual spraying were two times more likely to use IPT ($p = 0.01$). The study participants who bought ITNs were five hundred and four times more likely to use ITNs ($p < 0.05$), while those who use indoor residual spraying were sixteen times more likely to use ITN ($p < 0.03$). A household income of \$90 or below hindered the use of IPT and ITN in pregnancy. Giving of free or subsidized ITNs, encouraging frequent ANC visits and use of indoor residual spraying can improve the coverage

of IPT and ITN use in pregnancy. Finally, a community-based study needs to be done to provide further information on the use of IPT and ITN in pregnancy.