Background: Malaria is the second-after tuberculosis (TB)-most prevalent cause of communicable disease-related death globally. It is a preventable and treatable disease yet it continues to have a devastating impact on people's health and livelihoods around the world. 3.2 billion people were at risk of the disease in 2013. Pregnant women are the worst affected whereby they suffer negative consequences with their fetuses and neonates. Intermittent preventive treatment with Sulphadoxine-Pyrimethamine (SP) is recommended by WHO as a preventive strategy among pregnant women. An estimated 15 million of the 35 million pregnant women did not receive a single dose of IPTp in 2013 (WHO, 2013).

Objectives: The purpose of the study was to determine the factors influencing uptake of intermittent preventive treatment among pregnant women in Warrap State, South Sudan.

Methods: A cross-sectional study design was used to collect data from 94 pregnant women using multistage sampling. The tools that were used in data collection included; a researcher administered questionnaire, a key informant guide and an observation checklist. The analysis of data was performed using SPSS Version 16.0.

Results: Most of the respondents (62.8%) were between 25-34 years old, 74.5% were married, 35.1% resided in Panriang and 73.4% were multigravidas. Marital status (X2= 10.387, p-value=0.016) was significantly associated with the uptake of IPTp among the demographic characteristics of the respondents.

The majority of the respondents (88.3%)were housewives, earning less than 500SSP (58.5%), with no formal education (71.3%) and had poor knowledge on IPTp (100%). Among the socio-economic factors, occupation did not have a deterministic influence on the uptake of IPTp (X2= 7.162, p-value=0.028).

Regarding institutional factors, most of the respondents (57.4%) lived between 1-3 KM from the health facility, 83% stated that the health workers were available at the health facility, the waiting time was between 30minutes-1 hour and that IPTp was available (100%). Distance (X2= 8.991, p-value=0.0289) and waiting time (X2= 10.883, p-value=0.004) were statistically significant among the institutional factors that were influencing the uptake of IPTp. Conclusion: Marital status, occupation, proximity to the health facility, availability of healthcare workers and availability of drugs (SP) and waiting time were found to have an influence on the uptake of IPTp. The coverage of IPTp was found to be 86.7% among all the respondents surveyed.

Recommendations:The health workers should receive regular training on IPTp since their knowledge greatly impacts on the pregnant women’s knowledge.The health education talks given at ANC should include IPTp so that the pregnant women can be knowledgeable about IPTp and can easily ask questions relevant to the matter in case of any disparities.The policies behind IPTp should be regularly updated and the healthcare workers briefed on any changes to the programme or policy.