

Effects of intermittent preventive treatment with two doses of sulphadoxine-pyrimethamine in malaria infection and its associated adverse pregnancy outcomes: a systematic review

ABSTRACT

Malaria in pregnancy is associated with a number of adverse pregnancy outcomes. As a result, Intermittent Preventive Treatment has been recommended as one of the means for reducing the burden of infection and adverse consequences associated with it. This paper aims to evaluate the effectiveness of 2-dose Intermittent Preventive Treatment with Sulphadoxine-Pyrimethamine (IPT-SP) in reducing the risk of these adverse events. A comprehensive literature search of experimental studies was conducted, restricted to papers published from the year 2000 onwards. Thirteen studies were included, each comparing a 2-dose IPT-SP with another regimen and /or placebo. The Cochrane risk of bias assessment tool was used to assess the quality of included studies and a qualitative synthesis was done. Two-dose IPT-SP showed a consistent superiority over Chloroquine. It also demonstrated non-inferiority to other anti-malarial drugs like mefloquine and proguanil which were considered as 'gold-standards'. Only higher doses of SP and Dihydroartemisinin-piperaquine, showed clear superiority over 2-dose SP. This study shows that the 2-dose IPT-SP is effective in reducing the incidence of malaria in pregnancy and its adverse pregnancy outcomes. This effectiveness is complimented by its relative safety and ease of administration.

Keyword: Malaria in pregnancy; Intermittent preventive therapy; Sulphadoxine-pyrimethamine; IPT; Pregnancy outcome