

# Acceptability of preventative treatment of malaria in pregnancy with sulphadoxine-pyrimethamine plus dihydroartemisinin-piperaquine in Papua New Guinea

## Abstract

The World Health Organization recommends monthly intermittent preventive treatment in pregnancy with sulphadoxine-pyrimethamine (SP) given once for reducing the adverse consequences of pregnancy-associated malaria. Due to increasing malarial parasites resistance to SP, there is a growing need to find alternative drugs. We assessed consumer and provider acceptability of a novel combination for intermittent preventive treatment in pregnancy, using SP plus dihydroartemisinin-piperaquine (DP) in the context of a clinical trial in Papua New Guinea. Individual in-depth interviews were conducted with trial participants, healthcare workers and policymakers alongside focus group discussions with pregnant women (including trial participants) at health facilities enrolled in the clinical trial. Transcripts and field notes were analysed using both inductive and deductive thematic analysis applying a framework assessing: affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness, and self-efficacy. Most trial participants (n=35, 67%) expressed positive feelings and attitudes towards SP plus DP; reported limited side effects; and found the size, number, colour, and taste of the medicine acceptable. Healthcare workers and policymakers were concerned that, compared to SP alone, additional tablets, frequency (three-day regimen), and tablet size may be a barrier to acceptability. There was high perceived effectiveness of SP plus DP; most mothers reported that they did not get malaria or feel sick during this pregnancy. In the context of the trial, there was good consumer acceptability of SP plus DP. Healthcare providers were concerned about the realities of acceptability and adherence to SP plus DP outside of the clinical trial.