

Evidence Update

Maternal Health Series

Should all pregnant women be given antimalarial drugs?

In women in their first or second pregnancy, antimalarial drugs given routinely reduce severe anaemia in the mother and there are fewer perinatal deaths.

Inclusion criteria

Studies:

Randomized and quasi-randomized controlled trials.

Participants:

Pregnant women living in endemic malaria areas.

Intervention:

Interventions: drugs given to prevent clinical malaria, including regimens described as prophylaxis or presumptive treatment.

Control: no regular or routine antimalarial drugs.

Outcomes:

Primary: maternal illness requiring hospitalisation; severe anaemia; perinatal death.

Secondary: transfusion; anaemia; antenatal parasitaemia (mother). Placenta infected with malaria; mean birthweight; low birthweight; high birthweight; neonatal mortality (baby).

Results

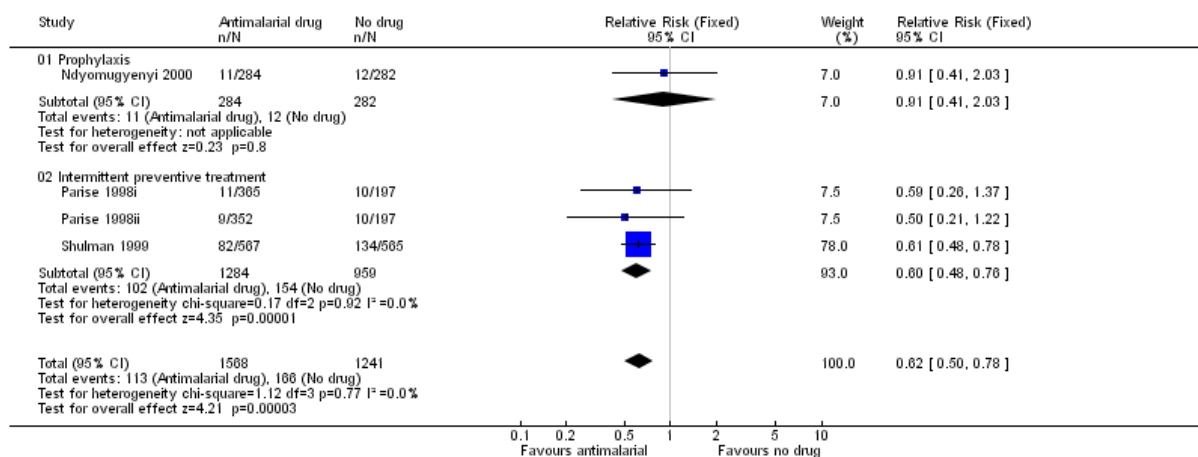
- Sixteen trials including 12,638 women. Two trials were adequately concealed.
- Antimalarials reduced antenatal parasitaemia when given to all pregnant women (relative risk 0.53, 95% confidence interval 0.33 to 0.86; 328 women, 2 trials).
- In trials of routinely given antimalarial drugs in women having their first or second baby:
 - severe antenatal anaemia was less common (RR 0.62, 95% CI 0.50 to 0.78; 2809 women, 1 prophylaxis and 2 IPT trials);
 - there were fewer perinatal deaths (RR 0.73, 95% CI 0.53 to 0.99; 1986 participants, 2 prophylaxis and 1 IPT trial);
 - mean birthweight was higher (WMD 126.7g, 95% CI 88.64 to 164.7g; 2648 participants, 6 prophylaxis and 2 IPT trials);
 - low birth weight was less common (RR 0.57, 95% CI 0.46 to 0.72; 2350 participants, 4 prophylaxis and 2 IPT trials).



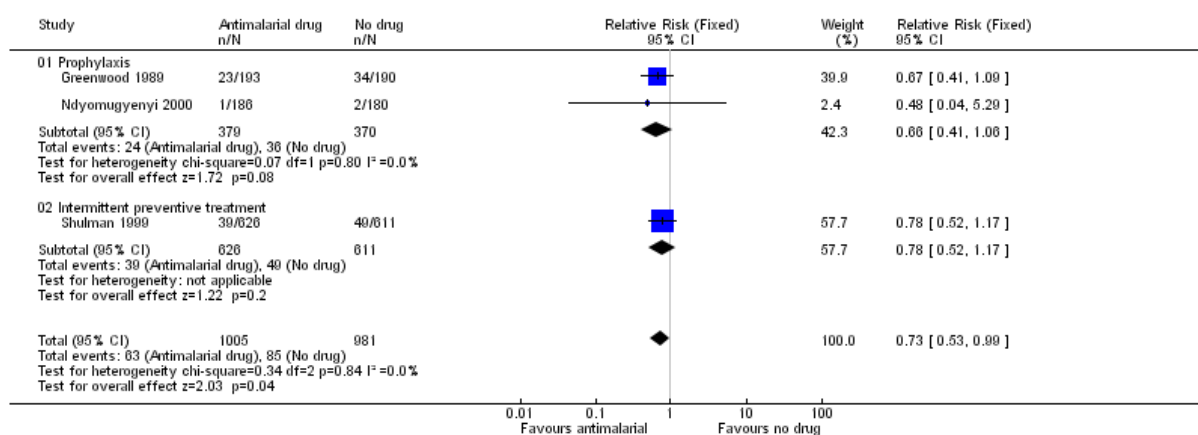
Adapted from Garner P, Gülmezoglu AM. Drugs for preventing malaria in pregnant women. Cochrane Database of Systematic Reviews 2006, Issue 4. Art. No.: CD000169. DOI: 10.1002/14651858.CD000169.pub2. Evidence Update published in January 2008.

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Antimalarial drug prevention versus no prevention (1st or 2nd pregnancy): severe antenatal anaemia



Antimalarial drug prevention versus no prevention (1st or 2nd pregnancy): perinatal death



Authors' conclusions

Implications for practice:

In intervention programmes for all pregnant women, routine antimalarial drugs reduce antenatal parasitaemia. In an analysis of low parity women, preventive treatment or drug prophylaxis is associated with fewer women with severe antenatal anaemia and antenatal parasitaemia. It is also associated with fewer perinatal deaths, higher mean birthweight, and fewer low birthweight infants.

Implications for research:

A large, simple trial implemented through routine health services could measure neonatal mortality. Such a study should compare prophylaxis (or presumptive treatment) with prompt regular treatment of morbidity.