Evidence Update

Malaria Series *August 2003*

Should all pregnant women be given antimalarial drugs?

In low parity women living in malarial areas, antimalarial drugs given routinely during pregnancy reduce the number of women with severe antenatal anaemia, and is associated with fewer perinatal deaths.

Inclusion criteria

Types of studies:

Randomised and quasi-randomised controlled trials.

Types of participants:

Pregnant women living in endemic malaria areas.

Types of intervention:

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

Control: no regular or routine antimalarial drugs.

Types of outcome measures:

Primary: maternal illness warranting hospitalisation; severe anaemia; perinatal mortality.

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

Results

14 trials involving 8768 women. Two trials were adequately concealed.

For the two studies intervening across all parity groups, antenatal parasitaemia was lower (relative risk 0.53, 95% CI 0.33 to 0.86).

For studies examining women having their first or second baby:

- severe antenatal anaemia was less common (relative risk 0.62, 95% CI 0.50 to 0.78, 4 studies);
- there were fewer perinatal deaths (relative risk 0.73, 95% CI 0.53 to 0.99, 3 studies);
- mean birth weight was higher (weighted mean difference 122g, 95% CI 81 to 163g, 8 studies);
- low birth weight less common (relative risk 0.55, 95% CI 0.43 to 0.70).

Adapted from Garner P, Gülmezoglu AM. Drugs for preventing malaria-related illness in pregnant women and death in the newborn (Cochrane Review). In: *The Cochrane Library*, Issue 4, 2003. Oxford: Update Software.

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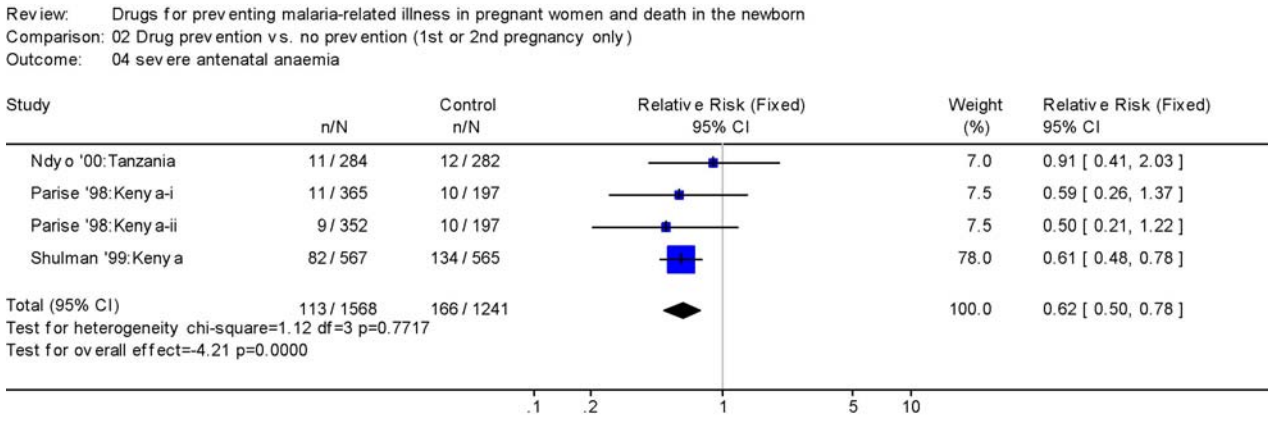

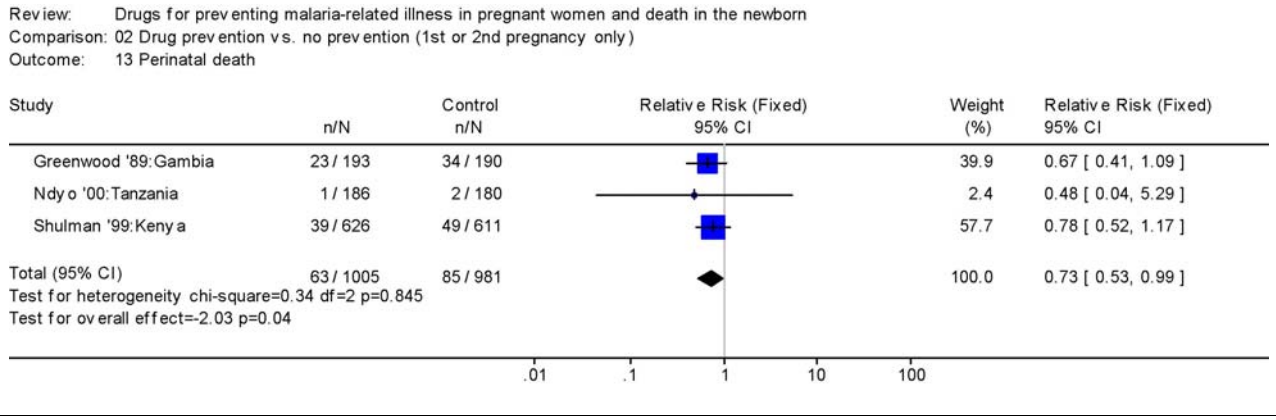

Reviewers' conclusions

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/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.