

## Intermittent preventive antimalarial treatment for children with anaemia

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Researchers from Tanzania and South Africa, who are part of the Cochrane Infectious Disease Group, hosted at LSTM, have conducted an independent review to assess the effect of intermittent preventive antimalarial treatment (IPT) for children with anaemia living in malaria endemic regions. This is a strategy of giving a treatment dose of antimalarial drugs to children at regular intervals just in case they have become infected.

Anaemia is a global problem, particularly in in <u>children</u> under five years in Africa and South-East Asia. While there are numerous causes of anaemia, malaria is a common cause in areas where it is endemic. Administering IPT to children might reduce anaemia, may protect from new infections by the Plasmodium parasite (which causes malaria) and allow faster recovery from the illness, from the anaemia, and help make the children less likely to succumb to other infections.

The authors identified six randomised controlled trials which included 3847 participants; three trials were conducted in areas of low malaria endemicity and three in areas of high endemicity. In some trials, iron supplements (also a treatment for <u>anaemia</u>) were also given to children and this was taken into consideration when the data was analysed. In all trials there was a group that received IPT and a control group that were given a placebo.

The authors found that the number of children who died or were admitted to hospital was similar in the children receiving the IPT to



those receiving the placebo, irrespective of whether they received <u>iron</u> <u>supplements</u>. While average haemoglobin levels were higher in the IPT group, the effect was found to be modest.

Mwaka Athuman from Ifakara Health Institute, Tanzania, one of the review authors, said: "While we did note small benefits in haemoglobin levels when treating anaemic children with IPT, there was no detectable effect on the number of deaths or hospital admissions. However three of the trials were carried out in areas where <u>malaria transmission</u> was low, so any estimate of the protective effect of IPT would be expected to be modest. The summary of the evidence will assist people forming policy guidance as to whether IPT is worthwhile, and provide a basis for researchers to consider whether additional studies are needed."

**More information:** Athuman M, Kabanywanyi AM, Rohwer AC. "Intermittent preventive antimalarial treatment for children with anaemia." *Cochrane Database of Systematic Reviews* 2015, Issue 1. Art. No.: CD010767. <u>DOI: 10.1002/14651858.CD010767.pub2</u>

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