New malaria cases in India are estimated at 24 million per year by the World Health Organization, resulting in a high socio-economic burden. A Cochrane systematic review, based on randomized controlled trials in non-Indian countries, showed that insecticide treated bednets are highly effective in reducing morbidity from malaria. As part of the development of evidence-based Indian first aid and prevention guidelines, a cooperation between Belgian Red Cross-Flanders and the Indian Red Cross Society, we aimed to investigate the effectiveness of both insecticide-treated and untreated bednets on malaria in Indian families.

**RESULTS**

- Box 1 represents the study selection flowchart. Fourteen of the 16 included trials were selected for the meta-analysis (due to availability of data on malaria cases).
- Studies were divided into subgroups according to the Annual Parasite Incidence (API); low endemic area (API<2) versus high endemic area (API≥2) (Figure 2).
- Meta-analysis showed that untreated bednets reduced the risk of malaria by 58% in low endemic areas (pooled RR 0.42 [95% CI: 0.30,0.60]) and by 39% in high endemic areas (pooled RR 0.61 [95% CI: 0.57,0.65]). When using treated bednets, the risk of malaria was further reduced; by 82% (pooled RR 0.18 [95% CI: 0.08,0.42]) and by 65% (pooled R 0.35 [95% CI; 0.26,0.47]) in low and high endemic areas, respectively (Box 2).
- The Cochrane Systematic Review (randomized non-Indian trials, 2004) showed that treated bednets had a protective impact on malaria (average RR 0.87 for stable malaria areas compared to no bednet use).

**CONCLUSIONS**

- There is evidence from 16 Indian studies that using (insecticide treated) bednets is an effective intervention to prevent malaria, which is in line with the findings of the Cochrane systematic review, performed outside India.
- The present findings support the current bednet use in the National Vector Borne Disease Control Programme in India and will be included in the Indian first aid and prevention guidelines.