Reviewer's report

Title: Are hygiene interventions likely to improve outcomes for Australian Aboriginal children living in remote communities: systematic review of the literature?

Version: 1 Date: 20 December 2007

Reviewer: Stephen P Luby

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Major Comments

1. The diverse interventions and assessment included in the review makes the conclusions difficult to interpret. The review considered several different interventions--handwashing with soap, face washing, household water treatment, insecticide spraying for flies and a number of different outcomes including (among others) diarrhoeal disease, finger tip contamination, hygiene knowledge and practices. It is not clear what benefit there is in evaluating these diverse interventions, when the outcome assessments are different (so they cannot be compared across intervention type), and the available data, per the author's assessment is so limited.

2. It does not appear that the search strategy identified all relevant references. It is troubling that only a minority of reviewed articles were identified by the formal search of electronic databases. Most of the articles (64%) were identified by hand searching/scanning reference lists, bibliographies, reports, and the world wide web. This suggests that there may be serious flaws in the strategy used to search the electronic data bases and so there may be other important work relevant to the author's objectives that are not included. Indeed, the authors include 4 studies of improved water storage in the home. At least two of these studies include household water treatment, as part of the intervention. There is a large and growing literature on household water treatment and safe storage. Reference 6 as assessment of point of use water treatment. suggests point of use water treatment was used. If so, why not include other POU work? A recent Cochrane review included 33 studies (BMJ, doi:10.1136/bmj.39118.489931.BE (published 12 March 2007)). Why were only 4 included in this review?

Minor Comments

1. The title of Table 1 is the list of included studies, but the results describe them as "potentially eligible for review"

2. The opening paragraph of the introduction would be strengthened by references that support the central contentions.

3. What is the evidence that the efforts by the Australian government to provide housing, and waste and sanitation infrastructure has "largely failed"?
What next?: Reject because scientifically unsound

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have received and currently hold funding from soap manufacturers to support research on hand hygiene