Reviewer's report

Title: Gaps in the evidence for prevention and treatment of maternal anaemia: a review of systematic reviews

Version: 1 Date: 9 February 2012

Reviewer: Valerie Smith

Reviewer's report:

The authors present a review of systematic reviews on interventions for preventing and treating maternal anaemia. The review is well-structured with a clearly described aim. Methodological components required of a review of systematic reviews are reported (i.e. aim of review, searching, inclusion/exclusion criteria, data collection and analysis, quality appraisal, results, discussion and conclusion). There are a number of issues, however, that the authors need to address in this paper to improve its quality for potential publication:

Major Compulsory Revisions:

1. The authors indicate that the inclusion of reviews on interventions for preventing and treating anaemia, in their systematic review, transcend the antenatal, intrapartum and postnatal periods. They indicate that 92 reviews were included, 27 of which concern the antenatal and postnatal periods. The results section, however, provides a narrative on the results of reviews concerning antenatal and postnatal interventions for preventing and treating anaemia only. This is confusing for and misleading to the reader and is a major flaw in the reporting of this paper. It is of little benefit to the reader for the authors to list the reviews concerning intrapartum treatment or prevention in a Table when the results of these are not reported on or discussed in the main text of the review. The authors need to readjust their aim, inclusion/exclusion etc. to accurately reflect the content reported and the results presented in their review.

2. The authors report on the methodological quality (results provided in Table 3) of 27 of the included systematic reviews; the authors appear to have used an adapted form of the AMSTAR Tool (although it is not referenced as thus; see Shea et al (2007) Development of the AMSTAR: a measurement tool to assess the methodological quality of systematic reviews. BMC Medical Research Methodology; 7:10) as their 5 criteria are reflective of/similar to 5 criteria included in AMSTAR. The AMSTAR tool is validated as a tool for assessing the methodological quality of systematic reviews (see Shea et al (2009) AMSTAR is a reliable and valid measurement tool to assess the methodological quality of systematic reviews. J Clin Epidemiol. 62:10). The authors should conduct a full quality appraisal based on AMSTAR and report the results to this effect. This is important for the reader for an increased and more accurate picture of the quality of the included reviews. This allows the reader to consider higher quality reviews...
and consider clinical decision-making based on these.

Minor Essential Revisions

1. Sentence 1, in the ‘Background’ section; the authors refer to a ‘global prevalence reaching over 40’….can the authors clarify as to ‘40 what’ they are referring to.

2. Related to point 2 (Major Compulsory Revisions); in the results and/or discussion sections; as the authors report their results it would be useful for them to highlight whether the review they are referring to is of high quality or not. This is important as the quality and strength of the evidence presented in the individual included review should influence the conclusions drawn in the authors’ systematic review which has importance for the reader in using the evidence presented when making clinical decisions.

Discretionary Revisions

1. Search strategy: can the authors provide a rational for why they limited their search to electronic bases only; i.e. a wider search base is required of a systematic review, yet there is no reference to any hand-searching of references lists or searching of grey/unpublished material in the text section that describes their search.

2. The authors provide limited statistical data in their review; it would be useful to provide to the reader a RR (or similar statistic) and 95%CIs (where appropriate) of meta-analyses from the included reviews, particularly where the results indicate statistically significant benefits. This might be done within the text or (and perhaps better done) in a ‘Summary of Findings’ Table; (this could easily be achieved by reorganising/re-naming Table 2 and adding relevant columns to include statistical findings of relevance).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

'I declare that I have no competing interests'