Author's response to reviews

Title: Does prenatal micronutrient supplementation improve children's mental development? A systematic review

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Author's response to reviews: see over
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RE: Manuscript # 1803405099441944 - Does prenatal micronutrient supplementation improve children’s mental development? A systematic review - Response to Reviewers’ Comments

Dear Editor:

I am re-submitting this revised manuscript for your consideration. Thank you for the opportunity to address the Reviewers’ comments. We have noted their concerns below; our responses are in italics. We have made the changes in the revised manuscript.

Reviewer 1

It might be worth further highlighting the issue of a single nutrient study using a pharmaceutical RCT approach - that might not be adequate where nutrient deficiencies often co-exist, and where individual supplementation might not result in benefit in absence of co-factors etc.

We did consider the co-existence of nutrient deficiencies in the studies. However, no study measured nutrient intake or status prior to supplementation. This is a study design flaw that is consistent with all the studies in our systematic review, and thus we have added a sentence about this problem to the Discussion section.

The search criteria restricted to English language articles. This might be a major limitation if it were shown to exclude significant studies. Many studies may have been conducted in areas where background dietary or serum levels were low, but published in other languages. Is it possible to get a feel for whether any such studies exist?

Thank you for this comment. While we agree that there are likely a number of non-English articles on the topic, it is not within the scope of this systematic review to assess what is published in other languages, as we do not have the ability to evaluate such articles appropriately. We also believe that the articles we have selected are representative of the literature, given that the studies were done in various places, in both developed and developing countries.

Reviewer 2

Abstract- say in the background that mental development included a number of dimensions as it is a little at odds to talk about the association of supplementation with better ‘child’ development.

Revised as suggested.

Background
Is it ‘foetus’ or ‘fetus’ – you need to be consistent throughout.

*We have revised the manuscript and used the word “foetus” throughout the text.*

Change ‘Barker demonstrated’ to Barker suggested

*Revised as suggested*

Methods- Search strategy
1st para - ‘selected randomised control trials (RCT)- then use RCT abbreviation throughout

*Revised as suggested*

2nd para- Remove ‘period of coverage noted below’

*Revised as suggested*

Dates should be 22 – 30 Dec 2009

*Revised as suggested*

Don’t need to give actual day of when additional search was performed

*As we provided the dates of the initial search, we felt that it was important to let the reader know how up to date the search was. Thus, we disagree with the suggestion to remove the date, and have left it in the text.*

Inclusion criteria- 2nd par- was there any disagreement? Over how many papers? If not, say so.

*The text has been revised to address this.*

Data extraction and quality appraisal - Remove ‘ Disagreement between the reviewers were resolved by discussion’

*Revised as suggested.*

Results
2nd para- reduce para to ‘Due to study heterogeneity, we were not able to meta-analysis the studies’

*Revised as suggested*

Mental development outcomes- add ‘(not detectable when children were tested later in life) to transient in page 10

*Revised as suggested*
Strengths and weaknesses- discuss publication bias- null result studies may be less likely to be published and therefore not picked up by the review

Revised as suggested

I don’t think the paper needs 3 tables and wonder whether the authors could include the information in tables 2 and 3 into table 1?

Thank you for the suggestion. We have put all the pertinent data regarding composition of the various supplements into one table (see Table 2).

We look forward to your response to this revision.

Sincerely,

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