Reviewer's report

Title: Impact of Vitamin A and zinc supplementation on malaria morbidity in Ghana

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Reviewer: Mala Ali A Mapatamo

Reviewer's report:

General Comments.
The methodology is well articulated and very informative and the Editor may consider it for publication. Yet, I suggest in-depth revision of the paper before its publication.

Analysis of the paper
1. Introduction
   • Paragraph 2. Hence a need to be replaced by hence home fortification may help improve...
   • Paragraph 3. Before coming to Zeba et al study, the authors may want to discuss first the status of malnutrition, vitamin A and zinc deficiency showing that they are major problems in Ghana.
   • Paragraph 4. Again, is micronutrients deficiency a problem in Ghana? What is the rationale of using younger children and not children of the same age as in Zeba et al study, for better comparison?

2. Methodology
   • Study site. Previous studies carried out in the Kintampo area indicate severe vitamin A deficiency with 51% of children under 5 years having serum retinol <0.70µmol/L15. Previous anthropometric data indicated a prevalence of stunting of 32% and wasting.... I suggest this section should go to the introduction.
   • Study design.
     o Participants. Did the study apply the double blind approach?

3. Discussion
   • The authors do not elaborate well enough on the differences or similarities between their findings and the literature.
   • For example, Shankar et al showed that vitamin A supplementation resulted in decreased malaria incidence, decreased severity of febrile episodes. However, the authors did not come to the same conclusion. Why this difference?
   • For example, several studies have indicated a relationship between low zinc status and increased incidence of malaria, what the authors have not found in their data. Is there any explanation?
• Authors could add a paragraph on the limitations of their study.

4. References
• The references are a little bit old. Only 4 out of 40 are # 5 years.
• They may try to add some more recent ones.

5. Recommendations
The paper could be published after revision. It is important to the field. Interest in micronutrients is growing.

**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 interest.