

Peer Review Report

Review Report on FREQUENCY OF VITAMIN A DEFICIENCY IN CHILDREN HOSPITALIZED FOR PNEUMONIA: AN INTEGRATIVE REVIEW

Review, Public Health Rev

Reviewer: Vicka Oktaria

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EVALUATION

Q 1 Please summarize the main theme of the review.

The authors reported the high prevalence of vitamin A deficiency in children under five years old hospitalized with pneumonia with the highest prevalence of 93.2%. Of screened studies, 10 studies were included in the review. The authors concluded that the prevalence of vitamin A deficiency was high (>20%) and may require further public health action.

Q 2 Please highlight the limitations and strengths.

The limitations were

- some of the included studies were more than 20 years ago but in the newer version the authors have included some recent publication
- the fact that in developing countries, where pneumonia hospitalisation in children are common, high dose twice a year vitamin A supplementation has been in the program for decades. Perhaps the authors need to discuss in alignment with this program
- I have also highlighted some area that need improvement in the Q3

The strengths

- The topic is interesting as pneumonia is currently a major child killer in LMICs but some clarification needed
- The articles searching were quite exhaustive as searched from several major databases

Q 3 Please provide your detailed review report to the authors, structured in major and minor comments.

Thank you very much for the opportunity to review this paper. I have several comments as follows:

Major comments:

- The study highlights that vitamin A deficiency is common in children hospitalised with pneumonia but need to discuss further the comparison with the vitamin A status in healthy children or non-pneumonia children. This might be needed to understand whether vitamin A is generally low in children or only very low in children who were hospitalised with pneumonia
- It need clarification whether the review suggests for vitamin A supplementing as a preventive measure or adjuvant therapy, or both. Currently there has been mixed messages in the discussion.
- In the objective it was stated that the age groups were limited to children aged 6 months to 5 years old but some of the studies had participants beyond this age window (i.e., Moreira, Kuti, Li). Please kindly state the strategy to deal with this issue as pneumonia is much more common in under five.
- Please kindly make discussion in alignment with the current high dose vitamin A supplementation program <https://data.unicef.org/resources/vitamin-a-coverage/>
- The current review discuss studies that reported vitamin A prevalence (in %) but with different cut off of vitamin A deficiency. This will challenge study comparison using percentage and rank them. It would be ideal if all the studies could use the same cut off which might need efforts to contact the original authors and re-

analyse the data. At least, when the authors stated in the text the prevalence in % for certain study to also include which cut off was used by the study.

– Please state in the methods section for the experimental studies, whether the reported vitamin A deficiency is only from the control group, or in both control and intervention group.

Minor comments:

– Perhaps stated keywords for article searching briefly in the abstract and date of searching

– The abstract conclusion need to be strengthened, including the rational and reason why new studies to investigate the topic is fundamental importance. It has been discussed extensively in the discussion but need to be stated in the abstract.

– the statement in the method section "The unit of measurement adopted for serum retinol levels was $\mu\text{mol/L}$, those studies that differed from this unit, were converted by the authors to unify the measure." perhaps need to detail the conversion unit with examples

– Figure 1 needs to be enlarged

– Discussion need to be more concise. Currently have several short paragraphs that has similar main idea and could be combined all together

PLEASE COMMENT

Q 4 Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes, I notice in the earlier version of the draft most of the included studies were conducted before 2000s but the new version has included most recent publication.

The current in-text citation was not organised in order (i.e., second paragraph of the discussion). I suggest the author to re-organised the citation

Q 5 Does this manuscript refer only to published data? (unpublished data is not allowed for Reviews)

Yes.

Q 6 Does the manuscript cover the issue in an objective and analytical manner

Yes.

Q 7 Was a review on the issue published in the past 12 months?

Yes.

Q 8 Does the review have international or global implications?

Yes but the discussion need to be strengthened and discuss in alignment with the current vitamin A supplementation program (<https://data.unicef.org/resources/vitamin-a-coverage/>)

Q 9 Is the title appropriate, concise, attractive?

Yes

Q 10 Are the keywords appropriate?

Please state "vitamin A deficiency" as a keyword

Q 11 Is the English language of sufficient quality?

acceptable

Q 12 Is the quality of the figures and tables satisfactory?

No.

QUALITY ASSESSMENT

Q 13 Quality of generalization and summary

Q 14 Significance to the field

Q 15 Interest to a general audience

Q 16 Quality of the writing

REVISION LEVEL

Q 17 Please take a decision based on your comments:

Major revisions.