

PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Advancing child nutrition science in the scaling up nutrition era: A systematic scoping review of stunting research in Guatemala
AUTHORS	Rohloff, Peter; Cordon, Ana; Asturias, Gabriela; De Vries, Thomas

VERSION 1 – REVIEW

REVIEWER	Reviewer name: Edward F Fischer Institution and Country: Vanderbilt University, USA Competing interests: None
REVIEW RETURNED	11-Sep-2019

GENERAL COMMENTS	This is an important survey of the literature, pointing out significant gaps. The results section summaries are excellent. Personally, I always find the methods section of such review articles tedious, but I understand that is the style. I would also note the the INCAP longitudinal study isn't just important in Guatemala, but provides the basic data on malnutrition impact for nutritional studies around the world (even with all its faults, it is a cornerstone).
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REVIEWER	Reviewer name: Emmanouil BAGKERIS Institution and Country: University College London, UCL, UK Competing interests: No competing interests
REVIEW RETURNED	20-Sep-2019

GENERAL COMMENTS	<p>This is a well written manuscript and the statistical comments are quite minor.</p> <p>1.The methods section does not have a statistical analysis section to indicate the use of Pearson Chi-Square test for the comparisons made in the main manuscript. Please also reference the statistical software used.</p> <p>2.At the sub-section of results "Summary of trends in research focus", it was not clear what the p-value $p=0.43$ is comparing. Please rephrase the last two sentences to indicate the comparison between 2000-11 vs. 2012-18.</p> <p>3.The figure 1 y-axis suggests that the 0-5 years prevalence of stunting is reported, however the x-axis indicates changes per decade. Please correct the axis accordingly and if possible provide p-values to indicate whether the prevalence change over time has been significant or not.</p>
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REVIEWER	Reviewer name: Jose C Monzon Institution and Country: Rafael Landivar University Guatemala Competing interests: None
REVIEW RETURNED	25-Sep-2019

GENERAL COMMENTS	<p>Overall: This is a review of the literature reporting nutrition specific interventions to address stunting in the Guatemalan context. A particular novelty this article adds is that it compares the amount of data and scientific evidence between two time periods before and after the Scaling Up nutrition standards and national strategies signed up by the Guatemalan government in 2012.</p> <p>Abstract: Since this will be very relevant to Guatemala, in line 31 and 32 I suggest identifying what national comprehensive policy on stunting you refer to (Hambre cero?) to be specific and differentiate from other nationwide policies since that started in 2005.</p> <p>Introduction: Line 87 first paragraph, you referenced figure 1, I suggest changing "child growth" to stunting prevalence since that is what is actually shown in the figure.</p> <p>Methods:</p> <p>a) A potential limitation is that your inclusion strategy is likely to have favored english published articles, and the inclusion of grey literature published in spanish seems a bit short by only limiting to "desnutrición crónica" and not including the word AND/OR "Guatemala". This may in part be addressed when additionally looking at the reviewed referenced lists of included articles but still falls short, considering that Guatemala is a spanish speaking country and that many review articles (e.g. from the European Union) are published in spanish. Also I suggest checking out "Análisis sistémico y territorial de la seguridad alimentaria y nutricional en Guatemala" from IARNA-URL.</p> <p>Results: Overall read good to me, observations on table 3:</p> <p>a) There isn't any studies with nutrition sensitive interventions therefore not sure if the column is really necessary?</p> <p>b) Hoddinott 2008 has no reference number,</p> <p>c) Mazariegos2010 is lacking a space between the year and the last name.</p> <p>Figures:</p> <p>Figures have no titles, I assumed the first one is figure 1 and 2 respectively but would be good to have the title on top in addition to that on page 29.</p> <p>References:</p> <p>Number 57 has a misspelled word</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

This is an important survey of the literature, pointing out significant gaps. The results section summaries are excellent. Personally, I always find the methods section of such review articles tedious, but I understand that is the style. I would also note the INCAP longitudinal study isn't just important in Guatemala, but provides the basic data on malnutrition impact for nutritional studies around the world (even with all its faults, it is a cornerstone).

In the introduction, we've added a few additional words emphasizing the importance of the INCAP longitudinal study.

We realize that the methods section of the article is a bit formulaic; this is because we have followed the PRISMA checklist for reporting on systematic reviews.

Reviewer: 2

1.The methods section does not have a statistical analysis section to indicate the use of Pearson Chi-Square test for the comparisons made in the main manuscript. Please also reference the statistical software used.

We have added a brief statistical analysis section to the Methods.

2.At the sub-section of results "Summary of trends in research focus", it was not clear what the p-value $p=0.43$ is comparing. Please rephrase the last two sentences to indicate the comparison between 2000-11 vs. 2012-18.

We have rephrased these two sentences.

3.The figure 1 y-axis suggests that the 0-5 years prevalence of stunting is reported, however the x-axis indicates changes per decade. Please correct the axis accordingly and if possible provide p-values to indicate whether the prevalence change over time has been significant or not.

We have changed the X axis title and the figure legend to hopefully make this more clear. Our goal with this figure is to show, qualitatively, that Guatemala has significantly more stunting than other countries in the region. We have also modified the relevant sentences in the Introduction and Discussion to make it clear that we are not trying to test the significance of the secular trend in Guatemala over time in the paper, as that would be a different analysis than our focus here. For example, we changed the sentence "Guatemala has shown limited progress toward improvements in... stunting..." to "Within Central America, Guatemala has... the highest prevalence of stunting."

Reviewer: 3

Abstract: Since this will be very relevant to Guatemala, in line 31 and 32 I suggest identifying what national comprehensive policy on stunting you refer to (Hambre cero?) to be specific and differentiate from other nationwide policies since that started in 2005.

We have added additional text to the Introduction to address and clarify these details, and we think this addresses the reviewer's question. We did not include the specifics in the Abstract, however, since they seem to be too detailed for inclusion there.

Introduction: Line 87 first paragraph, you referenced figure 1, I suggest changing "child growth" to stunting prevalence since that is what is actually shown in the figure.

We have made this change.

Methods:

a) A potential limitation is that your inclusion strategy is likely to have favored english published articles, and the inclusion of grey literature published in spanish seems a bit short by only limiting to "desnutrición crónica" and not including the word AND/OR "Guatemala". This may in part be addressed when additionally looking at the reviewed referenced lists of included articles but still falls short, considering that Guatemala is a spanish speaking country and that many review articles (e.g. from the European Union) are published in spanish.

The reviewer is correct that our search strategy privileges formal publications in article database, of which many are in English. However, database searches did identify many Spanish-language articles (published in Spanish, with English abstracts) which are included. We also clarify the addition of "Guatemala" to the Google Scholar search term and that the use of reference lists picked up many additional Spanish language references.

A big problem with the literature on malnutrition in Guatemala is that much of the Spanish literature is grey (e.g. technical reports from funding agencies in the European Union, from regional agencies, etc), often doesn't include methodological or citation details, and is poorly indexed in search engines. For these reasons, we don't focus strongly on this literature here, opting instead for the published literature in citation indexes. We are, however, acutely aware of the need to better sort through and organize this data - in the conclusion to this manuscript we mention our efforts to map NGO actors in Guatemala, as an example of our efforts to address this deficiency. We have made a discussion of the limitations of our search strategies more explicit in the conclusion of the manuscript.

Also I suggest checking out "Análisis sistémico y territorial de la seguridad alimentaria y nutricional en Guatemala" from IARNA-URL.

This is a great reference and we thank the reviewer for pointing it out. We have added a sentence and citation in the conclusion of the paper.

Results: Overall read good to me, observations on table 3:

a) There isn't any studies with nutrition sensitive interventions therefore not sure if the column is really necessary?

We added a footnote to the table noting no nutrition sensitive interventions found, and deleted the column as suggested

b) Hoddinott 2008 has no reference number,

c) Mazariegos2010 is lacking a space between the year and the last name

We have fixed both of these errors.

Figures:

Figures have no titles, I assumed the first one is figure 1 and 2 respectively but would be good to have the title on top in addition to that on page 29.

Yes, this we think is an artifact of the way the manuscript file is compiled by the editorial software. We have added labels to both figures to help with clarity and can delete them later on if needed for formatting purposes.

References:

Number 57 has a misspelled word

We have fixed this error.

VERSION 2 – REVIEW

REVIEWER	Reviewer name: Edward Fischer Institution and Country: Vanderbilt University, USA Competing interests: None
REVIEW RETURNED	29-Oct-2019
GENERAL COMMENTS	Revisions look good -- I think it is ready to go