Reviewer’s report

Title: Addressing malnutrition among children in routine care: How is the Integrated Management of Childhood Illnesses strategy implemented at health centre level in Burundi?

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Reviewer: Lucas Gosdin

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BMC Nutrition

Addressing malnutrition among children in routine care: How is the Integrated Management of Childhood Illnesses strategy implemented at health centre level in Burundi?

Overall comments:

This reviewer appreciates the opportunity to read this informative work. Studies of this kind are needed to evaluate the implementation of strategies to address malnutrition. The authors have carefully outlined the shortcomings and made a compelling case for action to strengthen the integrated approach to addressing malnutrition in Burundi’s healthcare settings. The following are comments for all sections of the manuscript:

"Height" should be changed to "height/length" since length is the likely measure for the youngest children.

Abstract:

The abstract effectively summarizes the manuscript.

Introduction:

Line 62: Please provide estimates of under-5 mortality.

Line 64: Missing citation.
Line 94-96: The research question should be rephrased as it implies a measure of change. This study design is unable to address improvement since there is no pre-IMCI baseline with which to compare.

Methods:

Line 184: There is no mention of the statistical tests used for the bivariate analyses. Where p-values adjusted for multiple comparisons? There are 64 comparisons in Tables 6 and 7.

Line 179: This is a good place to define "systematically." It is not until line 226 that it is made abundantly clear that systematically means "for every child."

Results:

Line 243-245: The word "advice" is both singular and plural.

Line 250: missing the word "likely."

Line 251-253: It is unclear what the bivariate comparison between male and female adds to the study as it is not addressed in the discussion section. Are male and female health workers trained differently or given different responsibilities? I am inclined to interpret the significant result here as a Type I error. Surely the p-value of 0.04 would no longer be interpreted as statistically significant if the p-values were adjusted for multiple comparisons. However, the tables show that the female health workers are performing better than the males on every task and warrants discussion regardless of statistical significance.

Line 271: remove the word "On."

Discussion:

The discussion fails to provide a potential explanation for the gender and contract differences in health worker performance.

Line 283: This reviewer would avoid using judgmental language. Perhaps replace "is disappointing" with something like "indicates a missed opportunity to benefit Burundi's children."

Line 315 and line 321: These sentences are, in my view, too judgmental and warrant rephrasing with the target audience in mind.
Line 326: Is the word "same" a typo for "SAM"? If so, the suggestion of having every child screened by the health worker in charge of managing malnutrition seems to run counter to IMCI and its feasibility is questioned.

Line 362 - 366: Take care not to generalize these results beyond your study population. Comparing your results to those of similar studies is good; however, this study alone does not have implications for non-studied countries.

Table 2:
Revise headers: "Cases asked (%)", "95% CI"

Table 3:
Add total sample size to title

Tables 4 & 5:
Revised headers: add "n (%) [95% CI]"
Add a note defining "systematically."

Tables 6 & 7:
Add total sample size to title.

Were the p-values adjusted for multiple comparisons? Once done, add a note explaining this and the statistical tests performed.

Add 95% CI around the differences, so readers can understand the precision of your estimates.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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