Author's response to reviews

Title: What influences the availability of medicines for community management of childhood illnesses in central Uganda: Implications for scaling up the integrated community case management programme.

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Author's response to reviews: see over
Editor  

Biomed Central Public Health  

Dear Editor,  

We are pleased to re submit our manuscript entitled: “what influences availability of medicines for community management of childhood illnesses in central Uganda? Implications for scaling up the integrated community case management programme” as an original article. This was a cross sectional study. This study found low drug stocks for the community management of childhood illnesses and this calls for strengthening of CHW supervision, medicine prescription and reporting, and increasing availability of functional diagnostic tools.  

We thank the reviewers for the excellent comments and below is a point by point response to the comment raised by the reviewers  

1st Reviewer  

- The introduction can be shortened. It is a bit too long (especially line 101 to 113)  

We thank the reviewers for this comment. We have accordingly revised the background section, as reflected in the text between lines 102 and 112.  

- Please be consistent in spelling (e.g. stock outs or stock-outs)  

This has been corrected through the article.  

- The study setting sub) section is too long (almost 1 page). Please reduce.  

The study setting section has been summarized as reflected from lines 116 to 131 in the article.  

- The discussion section is mainly focussing on the main results of this cross-sectional study. The main results are repeating the results-section and should be summarized. On the other hand, the limitations section is 3 sentences long. This discrepancy should be addressed. I would suggest using the four main headings: Main findings, strengths and limitations, implications for research, implications for community care.  

We thank the reviewers for these excellent observations. We have summarized and restructured the discussion section as suggested into the following sub headings: main
findings, implications for community care, implications for research and strengths and
limitations. This is shown from line 227 to 312 in the revised manuscript.

Please elaborate on the number of missing data and the potential effect on your results. For example, failure to register the stock adequately might have influenced your results.

The potential effect of missing data, and incomplete feeling of patient care registers has been included in the study limitations. It is possible that missing data in the patient care registers could have affected how the appropriateness of drug prescriptions was assessed.

Minor remark:
- Please avoid abbreviations in the abstract.
- Line 37: delete "the" before managing.

This has been revised see line 32 in the abstract

- Line 39: add "the" before Wakiso district

This sentence has been revised in the abstract see lines 34 and 35.

- Line 40: please specify how sampling was performed here.

We thank the reviewers for this comment. We have included how sampling was done as shown in lines 35 and 36 in the revised manuscript.

- Line 43: if you used multiple outcomes, use the term multivariate; if you used multiple variables to predict a binary outcome, use the term multivariable for the logistic regression model. Please revise throughout the manuscript.

This is an excellent comment. This has been revised throughout the manuscript.

- Line 45: did age have a skewed distribution? If so, use Interquartile range as measurement of precision.

We thank the reviewers for this comment. The distribution for age approximated a normal distribution (skewness was 0.02)

- Line 46: add "respondents" after 33.

This has been changed see line 41 in the revised article.

- Line 47: delete "one" before month.

This has been changed see line 43 in the revised article.

- Line 50: "respiratory timer": do you mean breathing rate timer? or a chronometer?
Yes respiratory timer referred to in the article is actually breathing rate timer. In most literature, including the iCCM documents and guidelines/policies, the breathing rate timer is commonly referred to as a respiratory timer.

- Line 83: replace "mainly" by "such as"
This has been changed see lines 78 and 79 in the revised manuscript.

- Line 93: for "these" three diseases
This has been changed see line 88 in the manuscript.

- Line 162: please mention total number of eligible respondents from which the random sample was taken.
We needed 305 CHWs (calculated sample size) out of 360 eligible CHWs from the two randomly selected HSDs.

- Line 186: "no" instead of "none"
This has been changed see line 161 in the revised manuscript.

- Line 205: please elaborate on the methods used to test for interactions, goodness of fit, discrimination testing & diagnostic statistics of the multivariable logistic regression.
The data analysis section has been rewritten to include methods used to test for interactions, goodness of fit and diagnostic test for a logistic regression.

2nd Reviewer

1. The authors should report all the "determinants" that were examined in the ext, not just the ones that showed a statistically significant association.

We appreciate this comment. In the results section, factors which were not statistically significant have been described as well. This is reflected in lines 213, 214 and 215 in the revised manuscript.

2. The authors should not infer causality from a statistically significant association. For example, appropriate drug prescriptions were found to be associated with drug availability. The authors have inferred that appropriate drug prescriptions is a determinant of drug availability when it could in fact be the other way around. Or the two could be associated without either factor being a cause of the other factor.

This is an excellent comment. This study was cross sectional in nature and we cannot infer causality. Thus throughout the article, we report factors associated with drug availability other than determinants of drug availability. We have accordingly acknowledged this in the limitations of this study.

3. In the last paragraph of the Results section, the authors mention "controlling for confounders". They must state which confounders were controlled for.
The factors we adjusted for were sex, education level, occupation and time since last training in dispensing. This has been included in the last paragraph of the results section. See lines 223, 224 and 225

4. The process of random sampling of participants is only mentioned in the Abstract - this should be described in the Methods section.

**The procedure of sampling respondents has been included in the methods section. See from line 142 to 148 in the revised manuscript.**

5. The statistical analysis should be checked by a statistician.

*We thank the reviewers for this comment.*

Minor essential revisions:
6. The first paragraph in the Background section refers to "the rate of decrease of under-five mortality" then states it is "insufficient to achieve significant reduction" - this needs clarifying.

*We thank the reviewers for this comment.* The sentence has been revised to read as “The rate of decrease of under-five mortality in Uganda from 1990 (160 per 1000 live births) to 2006 (137 per 1000 live births) and now 90 per 1000 live births was good, but insufficient to achieve the Millennium Development Goal of 56 per 1000 live births by 2015”. See from line 75 to 78 in the revised manuscript.

Sincerely,

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