Author’s response to reviews

Title: Malaria Rapid Diagnostic Tests in fever case management: a study of the experience with their use at lower level health centres in Uganda

Authors:

Caroline Asiimwe (caroline.asiimwe@finddiagnostics.org)
Daniel J Kyabayinze (d.kyabayinze@malariaconsortium.org)
Zephania Kyalisiima (zkyalisiima@ss.mak.ac.ug)
Jane Nabakooza (jinksuganda@yahoo.com)
Moses Bajabaite (cmbaja@yahoo.com)
Helen Counihan (h.counihan@malariaconsortium.org)
James K Tibenderana (j.tibenderana@malariaconsortium.org)

Version: 7 Date: 14 November 2011

Author’s response to reviews: see over
Dear Editor - Implementation Science Journal of the BMC,

We appreciate the second set of the reviewer Dr. Katie Reed. On the basis of her advice and arguments, we have made minor revisions on the content (tracked as ‘Current Revisions on Manuscript’) and major rearrangement of the text (tracked as ‘Current Revisions on Manuscript - Moved up’) over the last few months to make the manuscript more coherent. Our response to her recommendations are highlighted in yellow highlighted below;

From: Implementation Science Editorial
mailto:implementationscienceeditorial@biomedcentral.com
Sent: Wednesday, November 09, 2011 8:46 PM
To: Caroline Asiimwe
Subject: MS: 2022677724435569 - Malaria Rapid Diagnostic Tests in fever case management: a study of the experience with their use at lower level health centres in Uganda

MS: 2022677724435569
Malaria Rapid Diagnostic Tests in fever case management: a study of the experience with their use at lower level health centres in Uganda Caroline Asiimwe, Daniel J Kyabayinze, Zephania Kyalisiima, Jane Nabakooza, Moses Bajabaite, Helen Counihan and James K Tibenderana

Dear Ms Asiimwe,

The handling editor would like you to address the following in your manuscript before making a final decision:

'I think this is much improved and the authors have paid attention and made changes. It can be accepted subject to a very thorough re-look at sentence construction, expression and grammar throughout.

Response: The lead author acknowledges that there were grammatical errors affecting the flow of the text. The author has re-read the entire article and endeavored to correct grammatical errors obvious to her, to the best of her ability and knowledge. She requests further expert assistance from the journal editors, given that English is her second written and spoken language (e.g. The first sentence of the abstract is too long and can be expressed better as two sentence - qualitative aspects sought to (ungrammatical) research is undertaken not done etc).'

Response: Abstract. I have revised the first sentence of the abstract which read, 'While new health technologies can help improve health care delivery, understanding community responses and the capacity to incorporate technology into health centres in resource limited settings, is important to'. 'While new health technologies are known to improve health care delivery, health workers' reaction to new tools contributes to acceptance and use of the new tools. Understanding the operational capacity of resource limited health facility to assimilate new technologies is equally vital in informing implementation plans and budgets of national disease control programs.'

We would be grateful if you could address the comments in a revised manuscript and provide a cover letter giving a point-by-point response to the concerns.

Response: I appreciate this request. However, it is nearly impossible to provide a point-by-point response to all changes, as a result of the review and correction of minor and major grammatical errors in all the sections
Response: All changes in the manuscript are tracked. All letter responses are highlighted in yellow

Response: All changes in the manuscript are tracked. All letter responses are highlighted in yellow

Version: 4 Date: 27 June 2011
Reviewer: Katie Reed

Reviewer's report:
Major compulsory.
I was delighted to see that the authors have rewritten and resubmitted this paper. It is much more focused and informative. However this means that I am regarding it in many ways as a new submission and there are some aspects that could be improved before publication. We concur with you

Abstract. Some of the language in the first paragraph is awkward ‘This paper focuses on…..’
It was not clear where the ‘Five major attributes of mRDT acceptance’ came from this did not relate to either result, discussion or conclusion
‘One barrier was…..’ This sentence is confusing as you might have or +ve or –ve result from the mRDT. We appreciated your point and have endeavoured to relate attributes to the results and discussion in a more focused manner The sentences have been corrected

Background. Pg 3
This was a better introduction to this newly written paper. However I think that it would benefit from further work. We have done further research (e.g. Karsh B 2006, Blanford A, 2007) to enrich and inform this section.

Given the setting of the research I think that following references 4 & 5 there should be something about introducing new technologies into a low resource setting. This might be a similar test, perhaps early use of rapid diagnostics in for HIV testing. It would also be relevant to cite any existing similar research into the use of mRDT in other low resource setting, in SSA or elsewhere. What was done and the results. Again focusing on the introduction of the new technology. We appreciated this counsel and have focused the background on the introduction of new health technologies with mRDTs as an entry point to gaining early experiences in low income settings.

‘Previous reports proposed some factors….. ‘ this sentence needs referencing .
Page 4- this section has been deleted, as part of the effort to focus the paper better

‘In late 2006….’ The first sentence is rather awkward and could be phrased better. The 2nd half of the paragraph is confusing. You need to be very clear of the timeline of events and changes in policies. At present it is not clear and appears to contradict page 6 we have noted this contradiction and corrected it to read better
Page 6.

‘A cross sectional descriptive design was used’ this needs improving, to better describe what you have done. The description of the method has been enriched and elaborated better

Conceptual framework pg 10. This was interesting to see again and it has more
relevance to this paper than the first submission. The layout of conceptual framework was revised once again to do away with potential confusion in interpretation.

However you do not use it or refer to it again in either the results, discussion of conclusion. I suggest that you either integrate it or cut it out. If you do keep it then ‘these key factors were adapted from previous work’.... Needs a reference. We decided to keep the Conceptual framework, with a revision in its layout, given that the basis of our discussion of this paper stems from earlier studies by Judy Jeng 2004, 2006 and others, who worked around conceptual frameworks. We believe it is relevant and we have integrated it into the discussion section. We described its content in the methods section too.

PREVIOUS LAYOUT: Figure 1 Conceptual framework for exploring mRDT feasibility, acceptability and use at public sector lower level health centres in Uganda
Acceptance and Use

<table>
<thead>
<tr>
<th>Learnability</th>
<th>Willingness</th>
<th>Suitability</th>
<th>Satisfaction</th>
<th>Efficiency</th>
<th>Effectiveness</th>
</tr>
</thead>
</table>

Figure 1: Conceptual framework for exploring acceptance and use of malaria rapid diagnostic tests when introduced in public sector lower level health centres in Uganda, adapted from Jeng J (2004).

Pag 12 ‘health workers did not know the researchers, the objectives….’ I think you are trying to say that though the health workers knew that attendee’s in the health centres were being asked questions about mRDT they were not involved in the process. Thank you for the correction. We incorporated this revision

Pg 14 Data analysis. This paragraph is confusing. You might rework it into three Sections. This section currently on page 19, has been revised to have a detailed description of the analysis

You appear to have two sets of surveys (health worker and attendees). Each contained both quantitative and qualitative data (describe this):
The qualitative date was dealt with and analysed in the following manner……
(include references to justify and support your chosen method)
The quantitative data was dealt with and analysed in the following manner……
(did you use any statistical tests? If not say why and how you have used the data to describe different aspects of the research). It is best to present this section as simply and clearly as you can. The two surveys have been well described and a reference made, to the quantitative work which was published earlier

Results pg 14. In the previous section you say how you used the conceptual Frame work to help you understand or perhaps collate your results. This does not appear to be reflected in the results section as it stands. We have reflected the conceptual framework. The conceptual framework was meant to guide research (designing the questionnaires, conducting interviews, sorting and analyzing data in a thematic manner). It is therefore not presented as a result, rather used guide the discussion of the results
Results 16 ‘Worryingly some health workers…….’ Can you explain to the reader the relevance of the this comment. We used a less emotional statements and explained the relevance of major comments from our findings.

Pg 17 Policy and treatment . You have two pieces of writing here in italicises are these quotes that need references or findings from health workers that need identifications? Same on page 18. The policy statement was not a research finding. We have corrected the error of misrepresentation.

Page 21 last half of the page. I thought these results were very worrying and was surprised that there was not more mention of them in the discussion. Are the health workers making a decision that the test is inaccurate if its negative and so they should treat anyway. Or are they treating negative cases because of community and patient expectations, or both?. Both of which are very important findings. We agree with the reviewer and have discussed in detail the findings of the RDT as well as the potential implications of a negative RDT result on the feasibility of a new health technology.

Discussion pg 24. I felt that this was rather short and superficial. You have some very interesting findings and I think that you can and should explore them further. I would expect you to refer to some relevant literature and reflect on your findings. You have done within the 2nd paragraph relating to patient expectations but this is not your only finding. Also you should not be afraid to present your full range of findings, you are not hear to endorse the use of mRDT’s but rather to critically analyse what can be learnt from their introduction. Thank you for appreciating the usefulness of our findings. We have endeavoured to add detail to the discussion such as the effect of health policy frameworks, commodity distribution and support supervision plans. We have made references to previous published work, related to these findings too.

Page 25 Fig 3 is correct but file is labelled Fig 4. We have decided to delete figure 1. Therefore figure 3 is now figure 1 and figure 4 which was mislabeled, is now figure 2.

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

Yours sincerely,

Caroline Asiimwe