Reviewer's report

Title: Advancing the application of systems thinking in health: A realist evaluation of a capacity building programme for district managers

Version: 2
Date: 4 February 2014

Reviewer: Oystein Evjen Olsen

Reviewer's report:

The paper is an interesting and useful account of the practical use of a realist evaluation approach. Implementation and outcomes of interventions is complex, and evaluation tools need to reflect that.

Major Compulsory Revisions: None

Minor Essential Revisions:

1. Although it is relatively clear, the paper could usefully make the distinction between realist evaluation as an evaluation tool only (assessing the how and why of an intervention related to the outcomes) versus a tool that also aims at influencing causality - i.e. influencing the outcome by using the tool (see first sentence of "Conclusion" in the abstract for an example). Realist evaluation in the latter context becomes an intervention, and not merely an evaluation tool. This is sometimes a little unclear in the text, and has policy implications in that an intervention approach to the tool might have greater interest for a health manager.

2. Was the evaluation tool in any way used in an action research (or similar) approach in that health managers were given the results of the CMO analysis along the 3 year scope of the data collection period? It would be useful to clarify this in one sentence.

3. Following the introduction, particularly the last sentence of the first paragraph, indicating a comparison of outcomes to individual, meso, micro contextual factors, I was expecting the article to follow this outline of presenting the methodology, results and discussion. The article could benefit from a tighter structure in terms of presenting a clearer flow of thought between methods, results and discussion, either by using the stated levels of analysis mentioned in the introduction, or otherwise making it easier to follow the flow of the paper by using similar headings throughout.

4. Page 4: Second paragraph beginning "From a realist perspective": It is mentioned that a programme is expected to work through providing "new resources" to one or more actors...... I would presume that you also mean new processes "as a new way of doing things" - not limiting change to availability of resources only (resources being understood to be monetary, human resources, etc).
5. Page 5 first paragraph: The article states that the literature adopts research
design allowing unanticipated effects etc.. It would be useful with one or two
examples of such designs for clarity - not only referencing them.

6. Page 8 second paragraph: Use of abbreviation PT first time without
explanation.

7. Same paragraph: suggest deleting last sentence as it repeats message in
sentences above.

8. Page 10 figure 2: Messy figure, but perhaps not easy to change as it has been
described in previous paper?

9. Page 11 - Case selection, first paragraph. What are the performance
indicators of the 10 talukas? Should be briefly mentioned.

10. Page 11 -use of superscript notes: There is an extensive use of superscript
and footnotes to the paper. This makes the reading of the paper complicated,
particularly if important information is relegated to these notes.

11. Page 11: The particular note C should be explained in the text as it is not
easy to understand the meaning of "retention of mentoring interest" as an
indicator.

12. Page 11 and onwards - Data Collection: The description of data collected
should be considered aligned with the subscripts and footnotes to table 2. There
is scope for cleaning up the description in the data collection and results section.

13. Page 12 - missing description of the "self-efficacy assessment" and "style of
supervision" tool. This is also missing in table 2.


15. Page 13 - Analysis, last sentence: Incomplete use of "heuristic" term....

16. Page 15 - Results - second paragraph - description of figure 6: This section
could possibly be moved to the discussion section, as a discussion on the
variability of net change of stillbirths.

17. Page 16. Table 2: Missing superscripts 2 - 12 in the table. Consider reducing
number of footnotes and including important description in the text (see note
above). Avoid repetition between footnote and main text.

18. Page 21: The article describes the inclusion of 2 cases (Gubbi and CN Halli).
On this page there is nevertheless inclusion of data from Pavagada. This should
be explained to avoid suspicion of "data mining".

19. Page 21: Pavagada being understaffed is repeated twice in the discussion,
and could be cleaned or explained further.

20. Page 21 - last sentence: Justification of the term "understandably" is unclear.
This paragraph is unclear.

21. Page 24 - first sentence: relating to the first comments, it is unclear which "institutional outcomes" this sentence is referring to.

22. Page 26. It is unclear why the authors chose to use the multipolar performance assessment framework. The authors rightly mention in the Limitations section that there are a multitude of frameworks to use, and it while it is useful to choose one, the justification for the choice could usefully be included. In addition it could be useful with a brief mention of other related frameworks not used to describe impact of interventions. The introduction of the multipolar performance assessment framework could also be considered in the introduction of the article - providing a closure of analysis that would make the article easier to follow (see previous comment).

23. List of abbreviations - some missing? consider including PT.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.

I have published papers on other topics, from other geographical areas (Africa), together with one of the authors (BM).