Reviewer’s report

Title: Integration of maternal postpartum services in maternal and child health services in Kaya health district (Burkina Faso): an intervention time trend analysis

Version: 0 Date: 08 Oct 2017

Reviewer: Claudia Hanson

Reviewer’s report:

Integration of maternal postpartum services in Ghana

Thank you very much giving me the chance to review this interesting paper! Integration is so important and we need to become better in monitoring and evaluating what works, so I like to thank the authors having taken up this task.

However, I feel the paper would profit from some more clarity in methods and results. You describe the study at mixed methods which applies to me that there is also a qualitative part, but I'm not sure I got it clear what you mean?

I'm also struggling to understand your two data source: from registers and from linkages. Could you maybe add a figure to make this clearer where the data came from and how they relate. Without having this clear I cannot fully understand your tables.

You have several note that the quality of the HMIS was not sufficient, do you still think you have data which are able to say something?

More specific comments below

Introduction

Can you explain the intervention a bit more in detail, you talk about three interventions, intended to influence aspects of the building blocks, but I ‘m not sure I understand sufficiently from what is outlined in this paper.

You describe the effect of an intervention, so you need to spell the intervention out clearly and not in a footnote

In the discussion you mention the CHW, but was this is parallel, do you need to explain this in the introduction?

Method
The data collection would need to be described in more detail, what registers are there, what linkage methods between registers, what is the quality (assume some PRISM assessment has been done in Ghana illustrating completeness and quality aspects of HMIS data?),

How did you get to the linkage data?

How did you get to live births, those who were delivered in the facilities, does the number of live birth in facility approximate those of the target area (thus no major referral??),

I think the figure of live births and the increase as in the result section is rather to be taken up in the method - and it is for me not clear how you could get to such an increase, just because of birth rate?? Or what? Or an increase in facility delivery, but then the denominator is wrong as you would need to use for vaccination coverage all birth regardless where delivered?

Results

I find the tables hard to understand as I fail to understand what the different columns are, what are observation data? Did you observe some consultation to assess whether women get both services? Are linked data and observations the same?

I think it is misleading to use time period which include a different number of month. It counteracts with the message you want to give, can you re-group? Use quarterly information?

There are so many results and tables, I think you should decide which once to have in the main manuscript and which once in the webannex.

There is also sometimes methods or discussion incorporated in the results section, eg "the analysis of choice of an FP method is limited" This also suggest that you might better delete this part?

The sentence on generalisability also belongs rather to the discussion. Please check carefully, I assume there are also other sentences which are not strictly belonging t the results section eg 1.2 explaining how you got to the linkage data and which I was missing above (and which is still not clearly understandable at least for me what you did)

Could you lead more carefully through the table 5 so that one can understand the coefficients? And the main message more clearly?

Discussion

I think the result from the time series analysis suggests a decline in the number of women receiving FP after the intervention? The speed did decline, so the effect was inverse of what you wanted?
Comment on the % higher than 100%

I agree partly with your note on the technological advances, but there are also challenges, they will not fix all the quality issues, and I know at least from TZA that the described system had too many challenges..

I recommend to add a section on limitations of the study (data quality, generalisability, etc)

Conclusion

I feel the conclusions are not supported by the time series, or I misunderstood?

Minor: there are some sentences which could be changed to comply better with academic writing: "came the idea"

The footnotes are at the end of the document so that this information is easily overlook. Should these information be better in proper foot not endnotes? Or in an annex

Delete in the result section the numbering?

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.

No

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 recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:
Needs some language corrections before being published

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