Reviewer's report

Title: Supply side dimensions and dynamics of integrating HIV testing and counselling into routine antenatal care: A facility assessment from Morogoro region, Tanzania

Version: 5
Date: 12 February 2015
Reviewer: Stephanie Topp

Reviewer's report:

The authors have clearly invested considerable time editing this second version of the paper and it is a much stronger as a result. There are nonetheless a number of major revisions I would recommend before this manuscript is ready for publication. Many revisions are related to the paper’s overall objective and lingering issues of definitional clarity. These are important, as they underpin the manuscript’s contribution to field in terms of its ability to stimulate / move debate forward in this interesting area.

Comments / Major Revisions

1. The background is significantly strengthened compared to the initial draft. However, as it currently stands, it still does not adequately refine the reader’s focus. Should I be focused on PMTCT? On integrated services? On service coverage? On Tanzania’s B+ policy? These are of course all important and interrelated, but currently the background jumps back and forth instead of providing a ‘funnelling’ narrative that refines the readers’ focus.

2. Related to the above problem, the research objective is still not very clear to me. Examples of statements I found confusing or lacking in specificity include:
   - Line 103 – ‘in this paper we focus on antenatal care as an entry point for HIV testing and counselling’
   - Line 130 – ‘our focus on the supply side aspects of service delivery’
   - Line 135 – ‘recognizing that integration is a broad and complex topic, this paper only seeks to assess the service delivery part of this broader concept focusing on the structure inputs and certain key processes…’
   - Line 139 – ‘we aim to highlight critical service delivery dynamics that must be addressed as Tanzania moves towards further integration…’

I would strongly recommend a single clear paragraph in which the research question or objective is stated once, followed by an explanation of the conceptual framework / definitions that provide the parameters for this particular study. Be careful with the repeated use of phrases like ‘focus’ ‘aim’ ‘assess’ in relation to different things.

2. The background information on Tanzania is an excellent addition
   - Line 175: ‘5%’ should be written ‘Five percent’ as it is at the beginning of the
3. Study Design (Line 179): as with Comment 1 above – a clear, one-sentence statement of what this study is doing would be extremely helpful as the opening line for this section. E.g. This exploratory study of the structural factors influencing integration of HIV testing into RCH services in Tanzania formed part of a larger three year evaluation of …

4. The description of the study, including methods and data collection are vastly improved but require the following clarifications

- Lines 202-212: Given that the paper’s focus is on structural factors influencing integration of HIV testing into RCH – can the authors describe the eligibility criteria for selection of interview participants? Presumably the selection enabled them to provide better/privileged information about the study questions at hand?

- The description of the interview questions/themes needs to be more explicit in linking (for example) the reasons for asking about reported practices, supervision and compensation and the paper’s stated focus on structural factors influencing integration of HIV testing in RCH.

- While the characteristics listed in Table 3 are helpful – the table in its very summarized form does not serve the stated purpose of helping the reader to grasp the (fairly significant by the looks of it) differences in health centre characteristics. Knowing the mean/median number of employees and clinical staff across 18 facilities where at least one only has 6 staff, and another has 54, for example, is not relevant to the study’s objective. If the authors don’t want to actually list the individual characteristics, one suggestion would be to split these 18 clinics into 3 categories, ‘large’ ‘mid-sized’ and ‘small’ based on either catchment population or staffing – and provide summary stats for that. This would also provide a useful group for presenting some of that later results and reflecting on differences in the discussion.

5. Analysis: Lines 253-261 – this section would be more appropriate included in the study design, either before or after the description of the qualitative themes/questions. Analysis should include just a description of analysis approach (including statistical tests), not the tools themselves.

6. Results: Line 279 – Lines 278-281 – the authors include ‘processes of delivering care’ including the content of HIV counselling and providers’ competency as a reportable objective of the study. This has been mentioned only once (Line 135) previously. Given its important place in the results and discussion section these issues need stronger foregrounding in both the background and methods.

7. Results: Line 295 – by what criteria was space judged? This criteria (or summary table) should be included in the methods. If the criteria was subjective, based on observations of queues etc, this should be clearly stated.

8. Results: Lines 308-310 – it would be helpful to know what (if any) policies dictate the provision of a) HIV test kits and b) necessary commodities such as gloves, in the study sites. For example, are test kits ordered separately to
‘routine’ supplies? Are test kits / commodities ordered based on the number previously used in a month or on projected need or received in bulk each month as part of a standard kit? And did the providers interviewed comment on what factors influenced the ‘unreliable’ supplies (e.g. unexpectedly high patient numbers; transport issues; reporting or communication break downs)

• Similarly (and this applies to all the reported outcomes) – how uniform were the responses across the 18 facilities. Were there any differences between the facility with 6 staff to the facility with 54 staff…?

9. Results: The reporting of staff is a big improvement on the first version of this paper. However, Lines 347-384 – as noted above in Comment 4c – summary stats providing the mean number of staff and their experience across a significant range of facilities is not particularly useful. Please break this down, either to individual facilities or into categories that allow for meaningful comparison in terms of staff availability, retention, supervision etc and their likely influence on integrated HIV testing in RCH.

10. Results: Line 377 – authors note that ‘health workers reported that the increase workload, lack of sufficient providers and lack of integration were de-motivating’. It would be helpful to present more or better quantitative data to support these perceptions. For example – a description of how integration of HIV testing into RNH constituted an increase in work load (a list of associated tasks would be one way to do this); and actual staff to patient ratios (something the currently summarized HRH data doesn’t allow for). As above, I would also be very interested to understand if there were differences in the perceptions of staff working in the small facilities – where there is typically a far greater burden of multi-tasking, as compared to the facilities with 40-50 staff and (presumably) more defined departmental duties.

11. After several readings, I realize the results to not make clear how the implementation of ‘integrated’ HIV testing in RCH is materially different from non-integrated services. This is a substantial weakness that should be addressed through brief description in the background and/or methods, enabling the authors to report on these differences with more clarity in the results.

12. Results – Lines 386-393: please report actual numbers after percentages; this is important given the purposive sampling used.

13. Results - Line 393: The report of low use of job aides needs some contextualization – were job aides generally available (and how did you know)? Did staff know about them? Were there sufficient to go around etc.

14. Results - Provider ‘codes’ after quotes – please briefly explain the provider coding system in the methods section – e.g. (02-27 means…). If the current system does not include it, please identify which health facilities providers were attached to, and their professional qualification (e.g. nurse, clinician, counselor).

15. Discussion: The results demonstrate some interesting and important findings and by and large, the discussion addresses the main findings.
16. I understand the authors’ hesitation to end with limitations but I would still strongly recommend moving this section. It remains jarring in its current location and is a disincentive to read on, where there remain interesting and important reflections to come. The priority of the discussion should be to present the interpretation of the results and all studies have limitations that must be outlined.

17. The overall coherence of this Discussion would be improved by addressing the following:

- Vis-à-vis Comment 11 above – much of the discussion focuses on what is needed to improve/strengthen integrated HIV testing in RCH. But discussion makes a number of assumptions / leaps (in terms of the readers’ understanding of the difference between integrated and non-integrated services) which are currently not substantiated by background information or the results presented (the only reference being in line 481 which references literature on the potential for integrated services to increase workload, but does not go into detail). Greater clarity around this issue through out the paper is needed. I recognize that a similar note (Comment #1) was made by the first reviewer in their first round of comments. I can see the authors have partially addressed this – but what I am specifically suggesting here is the need to describe how, in the facility settings for this study, integration differed from non-integrated services. This would provide a more material basis for the presentation of the interview/observational data about problems with space/staff etc etc.

- It would be good to see a little more structure in the discussion in terms of a presentation of both findings & interpretation of the causes and possible solutions to the space, stock, staffing and service delivery themes. This would involve restructuring rather than rewriting as much of the content is already there.

- Consistency in relation to the way ‘integration’ is framed is essential. For example in line 494 the authors state that HRH issues may limit or reverse the ‘gains of integration’; while in lines 510-511 they more moderately report: ‘these results suggest that while integration at the point of delivery through the merging of some services has potential, it still faces major challenges’. This latter statement is an excellent summation and mirrors findings from the literature which show that despite being intuitively appealing, integration is not a cure all, and depending on the context may not result in any gains at all.

- Line 465: This reference is considerably out of date; supply levels are notoriously changeable and it is difficult to justify using 2006 data as yardstick against which to judge current findings unless heavily qualified in terms of Tanzania’s historical health system weaknesses.

Minor Revisions

1. Abstract: Line 39 – clarity would be improved by inserting ‘services’ or ‘testing’ after ‘HIV.’
2. Background: Line 90: replace ‘;’ after diagnosis, with a ‘,’
4. Methods: Line 152 – suggest inserting ‘recommended minimum’ between ‘WHO’ and ‘established’

5. Methods: Line 157 – As a point of interest, please specify whether the ‘volunteers’ formally incorporated into Tanzanian health system (e.g. listed as part of the human resource establishment) or ‘informal’ in the sense that their participation is unpaid and completely voluntary.

6. Methods: Line 160: replace ‘;’ after system with a ‘,’

7. Study Design: Line 181: remove ‘Tanzania’ after Morogoro – it is redundant in this sentence.

8. Study Design: Line 198: suggest inserting ‘eligible’ between ‘the first ten’ and ‘women’.

**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