Reviewer’s report

Title: Effectiveness of Community-Based HIV/AIDS Service Delivery Models Used to Reach Female Sex Workers along Malaba-Kampala Highway, Uganda, 2017

Version: 0 Date: 30 Apr 2019

Reviewer: Katrina Ortblad

Reviewer's report:

OVERALL: An interesting mixed methods paper, that maps out access to various HTC services among FSWs along the Malaba-Kampala highway and linkage to care among those who test HIV-positive. The paper lacks, however, a clear focus and clear research questions - with methods and results then mapped to these research questions. The presentation of the methods and results are also somewhat confusing. First, it is unclear what exactly the SW-focused HTC interventions look like in the area the authors are evaluating. Then, it would be helpful if the quantitative and qualitative methods were described separately - including the sample size, data collection, and analysis section for each of these. It would also be helpful if presentation of the result in the text (especially the quantitative findings) were more descriptive - interpreting the big-picture findings, with the finer details left for the tables and figures.

MAJOR

* Please clearly state the research question(s) this paper is addressing at the end of the introduction. And ensure that both the quantitative and qualitative findings help answer these questions.

* Please provide more details on what HTC services are specifically being provided along the Malaba-Kampala highway, who is paying for each of these, how abundant each of these services are, the frequency at which they occur, etc.

* Consider restricting your methods section so you have a quantitative and qualitative section, then describe the study populations, sample size, data collection and analysis for each of these sections.

* In the presentation of the quantitative results, try not to duplicate a description of the results that are already being presented in the Tables, but highlight the important, big-picture findings.

MINOR

Abstract

* (Methods): More description of the community-based HIV service delivery models would be helpful here - e.g., what do they entail, when were they implemented, etc.

* (Results): Of those who tested HIV positive, where these all new HIV-positive test results? (i.e., were they not previously aware of their HIV-positive status?)
* (Conclusions): "Community-based HIV/AIDS service delivery models are challenged with inconsistent supply of logistics and unfriendly services" - this isn't supported by the results presented.

Background

* (Line 54): Are these declines global declines? Please specify.

Methods

* (Lines 77-80): Who is implementing these specific community-based HIV service delivery models? E.g., NGOs, MAPRI, the Uganda MOH?

* (Lines 80-82): Do you have any evidence that HIV prevalence has not reduced in this population? Or is it better to say that prevalence has remained high?

* (Line 93): Not sure where this sentence fits in… seems out of place.

* (Lines 95-98): How did you evaluate all these things?

* (Lines 107-109): Consider categorizing the services into three areas for clarity: (1) static facility services, (2) outreach services, and (3) peer-to-peer services.

* (Line 110): Consider putting "Static facility-based services" in italics.

* (Line 112): What free commodities?

* (Lines 116-121): How many different outreach services are operating at the study site?

* (Lines 122-125): Who is training the peers and paying them to provide these services? How many peers are operating in the study area?

* (Lines 126-132): Would be helpful to map the funders to each of the services you describe, instead of having them at the bottom.

* (Line 137): How were these individuals selected to be interviewed?

* (Line 154): Citation for the Kish and Leslie formula?

* (Lines 148-159): What defined if SWs were residents (i.e., living in the area for X number of months)? Where there age restrictions for participation? What are SWs being sampled for - e.g., quantitative or qualitative interviews or both?

* (Line 169): What would be an example of a local contact person?

Results

* (Lines 210-216): Instead of listing what is in Table 2, could you interpret this for the reader (e.g., the majority of participants were between the ages of 25-34 years… )
* (Lines 217-229): Same comment as above.

**Discussion**

* (Line 338): Move payment for interviews to methods section.

**Figure/Tables**

* (Table 1): Not sure this table is necessary, this information can be clearly described in the text.

* (Table 3): Can you put some of the more important findings from this table into a figure? Or a number of different figures that highlight your main findings? (e.g., the indicators currently presented in Table 1).

* Could you add a table that summarizes your qualitative findings - e.g., detail challenges faced by providers and challenges faced by SWs.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**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 am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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