Reviewer's report

Title: Home based HIV counseling and testing: factors associated with access to HIV care services in eastern Uganda

Version: 5 Date: 29 June 2015

Reviewer: Louise Knight

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Overall Question:
Interesting to read and an important topic, thank you to the authors for this contribution. Assess to HIV care is an ongoing issue and it is good to see work trying to understand access issues at the population level in Eastern Uganda – good to see these data captured and analysed by researchers who understand the local context. The question is well defined and the background useful and very comprehensive.

Minor essential revisions:
Methods: Some more clarity required: The outcome cotrimoxazole may best be described as a binary variable.
1) The time from testing HIV positive and first to visit clinic visit, relating to the access to HIV care (receiving cotri), could be better described in the methods. It is not altogether clear how this is to be explored in relation to the other access to care data. Was this data captured in the same way from the questionnaire asking participants who could have been referred over a 3 year period 2006 – 2008 –when they were referred and if they did go within those time frames and what services they received (or is this data from the routine monitoring data). Recall issues are mentioned in limitations but could be important issue around this question. How does the outcome ever receiving cotri (between 2006-2008) relate to the time to first visit- I did not see a full description of time to visit in the “measurement of variables” or anywhere in the methods- I may have missed it? but it seem to be first mentioned come in to the results line 293.

2) Sampling: some clarity required here – Is 8044 the total number register from 2006-2008, did the sampling frame include <18, residing outside of district? As, in the methods, it states that if they did not reach the eligibility criteria “the next 15th name was sampled” whilst in the discussion its mentioned that “next person” on the list was selected and that <18 are included, would be good to have this clear in the methods. Did all persons sampled and found, consent to the study?

Data management and analysis
3) The researchers have decided on a predictive model rather than an exploratory model. Constancy is required where the authors mention assessing confounding to the “main exposure”. Maybe a helpful addition to reporting would be to state which were the insignificant variables at bivar that were deemed
important in influencing assess to care and explored in the mulivar model.

Reporting of results:

There are data results descriptions above the data tables, i.e. included in with the tables- please check the journal guidelines.

4) Some changes to tables advised and some clarity on data explored: Is there a 95% CI around the 81% estimate of access to HIV care. Regarding the %’s by type of services, this is out of the total respondents interviewed, could be useful to understand number of individuals could have accessed say, TB or malaria services but had not assessed HIV care.

5) Were there only 29 pregnancies over that period (29 PMTCT) – were data captured on numbers of pregnancies and assess to HIV care/PMTCT – if so, this could be interesting to present to understand the women's characteristics in relation to issues of assess.

Table 1, 2 and 3:

6) A note on the logistics regressions: there are small numbers in some groups and at least one case where the baseline reference group in the regression is small i.e. age group.

7) Table 1: Perhaps presenting the percentages accessing HIV care within groups, rather than across the groups, would aid comparison and interpretation.

8) Would be easier to read if reference groups in regressions were consistently presented as the first grouping.

9) Given the finding that men were more likely to assess HIV care (adjusted by age,…) it may have been interesting to look at distributions between gender and other factors of interest, were any interactions explored, if so please report in the methods, (i.e. gender and family/community support).

10) Table 3 has key of *** p<0.001 although no effect of this significance reported.

11) Table 2: Please check interpretation of the unadjusted odds ratio for family support, an OR of 0.4 is presented with the statements “0.4 time less likely”. What is “N = sample size used” referring to in the table.

12) Comment: Did the researchers explore if there were differences between types of community support e.g. community sensitization compared to the other more direct support to enable the client to attend the visit.

Last graph

13) Last graph -not numbered – is it time from HCT (HIV +) visit with referral to first visit at health facility? Was data on time to visit explored by gender and age? may have been a useful addition.

General on results:

14) line 316- talks of respondents where as the data presented is out of the 258 who accessed hiv care not total respondents.

Discussion:
15) The OR are stated – but they are adjusted (AOR). Careful with interpretation wording on line 352 re older age groups significances against 18-24 year olds.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

None.