Reviewer's report

Title: Social cognitive determinants of HIV voluntary counseling and testing uptake among married individuals in Dar es Salaam Tanzania: Theory of Planned Behavior (TPB)

Version: 2

Date: 28 August 2014

Reviewer: Joseph KB Matovu

Reviewer's report:

The manuscript addresses a potentially important subject. HIV infection risk is on the increase among married individuals yet many of them are not aware of their own let alone their partners' HIV status. So, this paper would be an important addition to efforts aimed at understanding HIV testing dynamics among married individuals. However, on the whole, the paper is poorly written and requires extensive revision before it is accepted. Here below are my general and specific comments that can help the authors to improve it accordingly:

General comments
1. This manuscript is poorly written and requires extensive language editing to improve expression and sentence construction
2. The authors require to work with a Statistician to reframe the tables and senior writer to improve the presentation of the science
3. The discussion section is too weak and introduces new issues that are not presented in the results section
4. Most references are incomplete and not formatted according to journal style
5. In the methods section, the authors should describe how the scores reported in Table 2b were generated and how they were interpreted
6. The authors should ensure that they are using the right forms of the terms: 'social cognitive' and 'socio-cognitive' as well as 'social demographic' and 'socio-demographic'. The commonly used expressions are: 'socio-cognitive' and 'socio-demographic'

Specific comments

Abstract
1. The study was done among married individuals …residing in urban Tanzania. Where exactly?
2. The whole methods section should be revised to improve clarity. For instance, on page 2, line 31-32, the authors write, 'we drew constructs from … to measure HCT among married individuals using Likert scales’. Looked at more carefully, the statement might be taken to either mean that the ‘drawing of constructs’ from the model was done by using Likert Scales or that the measurement of the
factors associated with HCT uptake was done using Likert Scales. This statement should be rewritten to reduce this ambiguity.

3. The statement, ‘The social demographic variables adjusted for were age …duration of marriage’ that appears in the results section should be moved to the methods section where it belongs. Telling us what was adjusted for is not a finding!

4. The conclusion should refer to the study objective and the title. The study aimed at exploring social cognitive determinants … So, the authors should show what they found regarding these determinants, and this should be the opening statement

Background

1. Page 6, lines 111-114: the two sentences – one beginning, “In the same reasoning…” and the other beginning, “Perceived risk was the only construct…” should be merged into one sentence

2. The authors indicate that while their study was guided by the Theory of Planned Behavior, they did not attempt to fully test the model. The implication here is that there was some level of testing the model, though not ‘fully’. How was the model tested, if at all? Again, if the authors did not attempt to fully test the model, then what did they do with the model? Why was it necessary to use the model as the guiding theoretical framework? These aspects should be clear to the reader.

Methods

1. What does, ‘…an HIV prevalence of above 10 percent’ mean? Why not state the exact prevalence?

2. I suggest that the authors use the phrase, ‘married individuals’ consistently across the manuscript rather than the many terminologies used – the rest should be dropped so that the phrase, ‘married individuals’ is retained throughout the paper.

3. Line 134 – shows that the interviewers alternated between females and males in the different households. This is repeated in line 140-41.

4. Page 9, line 164: what does ‘a 5 Likert type of scales’ mean? Did you mean a 5-item, Likert type of scale? If so, please rewrite and also state what these 5 items were. Also, please indicate some of the statements to which the respondents were asked to indicate their opinion to, and show how the ranges were graded, e.g. 1=Strongly agree; 2=Agree; etc. so we know which scale had what weight.

5. In the current write-up, one can assume that the paragraph on ‘Theoretical constructs’ (page 8) and the subsequent sub-sections – attitude, subjective norm and perceived control – are independent sections yet in my view, the sub-sections represent the theoretical constructs mentioned in the paragraph on ‘Theoretical constructs’. The authors should include a statement that helps the reader to understand that what follows after ‘Theoretical constructs’ is a break-down of each of the constructs identified from the TPB & Health Belief
Model rather being independent sub-sections on their own.

6. On page 10, the authors indicate that they assessed perceived risk by asking respondents about their ‘likelihood of contracting HIV in the future…” This statement implies that the respondents were HIV negative, although no attempt is made in the paper to show that the study sought to enroll HIV-negative individuals!

7. Under ‘data analysis’ – the statement beginning ‘While using Chi-square… and perceived risk’ is not clear to me

8. The authors indicate that they performed ‘multivariate analysis using logistic regression to assess….’ What factors were entered into the model? The authors should consult a Statistician on the use of the term ‘multivariate’ as opposed to ‘multivariable’

9. On ethics, the authors indicated that they, among other things, sought verbal consent from the household head… what happened if the respondent was himself/herself the household head?

Results

1. The authors should check the results presented for authenticity. In line 229 (page 11), the authors indicate that majority (57, 28.5%) of the respondents were married for 4-6 years… However, according to the data in Table 1, majority (101; 50.5%) had stayed together for 7 or more years!

2. Also, the authors indicate that 75% of the respondents were in secondary school, etc. There are 2 issues here: Use of “in” implies that they are still students, or they were students at the time of the study, yet the study enrolled married individuals! This should read as, ‘…had secondary education’. Two, in Table 1, the percentage given is 66.5% - not 75% as reported.

3. Tables 2a and 2b are not referred to anywhere in the results section

4. Line 238 (page 12), the word is ‘predictor’ – not ‘predicator’

Discussion

1. On the whole, the discussion section should be rewritten to focus on the key findings of the study. Most of the issues discussed are not part of the study and were not reported in the results section. A few examples can here to highlight this point:

a) The finding that married individuals had neither had life time HCT nor aware of their partner’s HIV status – is new (not reported in the results section) and outside the scope of the study! This suggests that the subsequent statements that try to explain why this is so are not necessary!!

b) The authors also discuss the issue of knowing one’s HIV true result ‘…knew their HIV status correctly’ (line 255, page 13). But nowhere in the methods or results section is there any reference to assessing whether participants knew their true or correct HIV results!!

c) Line 270 – page 13: The authors caution us not to “generalize the HCT intervention strategies across different the population”. Where is this coming
from? This paper is not about HCT interventions, but the role of social cognitive factors in influencing HCT uptake among married individuals!!

Conclusion
1. In stating the conclusion, the authors should ensure that it rhymes well with the study objectives and the title
2. The statement beginning, ‘This needs to be …HIV positive results’ (lines 315-320, page 15) is too long to make sense. The authors should rewrite this into 2 or more sentences.

References:
1. Majority of the references are incomplete and poorly presented, e.g. refs 2,3,5,7,8,9,10,11,12,15,16,17,21,23,26,28,29,30,31,3238,39,41,42,47,48,49,53 – among others

Tables
1. The tables are poorly formatted and begin at the bottom of the page
2. The use of “Refs” in Table 1, 2a and 2b – is inappropriate. Please consult a Statistician for assistance
3. What do the values shown on the extreme right of Table 2b mean? How should we interpret them?
4. Why is Table 2b presented in ‘mean scores’? What do the mean scores mean? For instance, with regard to occupation – there is a mean score of 46.2 for those with no job. What does a mean of 46.2 for no job mean?
5. How were the mean scores in the lower part of Table 2b (the one on socio cognitive factors’ calculated? What do they mean? Let’s take the example of ‘subjective norm’. A ‘Yes’ to subjective norm has a mean score of 187.9 while a ‘No’ has a mean score of 145.8. What do these scores mean?
6. How do we interpret the P-values shown on the extreme right?
7. Table 3 should present both un-adjusted and adjusted odds ratios. I would re-arrange the table to begin with socio-demographic and end with socio-cognitive factors.

Level of interest: An article of limited interest

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:
I declare that I have no competing interests