Author's response to reviews

Title: Religion and HIV in Tanzania: Influence of Religious Beliefs on HIV Stigma, Disclosure, and Treatment Attitudes

Authors:

James Zou (jzou@fas.harvard.edu)
Yvonne Yamanaka (yjy2@duke.edu)
Muze John (muzejohn0s@yahoo.com)
Melissa Watt (mcroche@email.unc.edu)
Jan Ostermann (jan.ostermann@gmail.com)
Nathan Thielman (n.thielman@duke.edu)

Version: 2 Date: 10 November 2008

Author's response to reviews: see over
Dear Dr. Alexandersson,

Enclosed please find the manuscript “Religion and HIV in Tanzania: Influence of Religious Beliefs on HIV Stigma, Disclosure, and Treatment Attitudes” (MS: 9958145242184480) resubmitted for publication on BioMed Central in a revised form. The study was approved by Selian Hospital in Arusha, Tanzania, and was also approved by the Duke University IRB.

A list of changes we have made to address the points raised by the reviewers follows.

**REVIEWER 1: Lisa Norman**

1.1. “You cannot start a sentence with a number.”

- We have rewritten our sentences so that they do not begin with numbers.

1.2. “No 95% confidence intervals are presented for the odds ratios. They need to be included in the results section as well.”

- We updated Table 4 to include 95% confidence intervals for the odds ratios. In supplementary Table 1, we added the 95% confidence intervals for the fully adjusted odds ratios in Table 5. We did not add the CIs to Table 5 directly in order to keep Table 5 as uncluttered as possible. We only give the CIs for the fully adjusted odds ratios since these are the primary results reported.

1.3. “The authors do not discuss any work upon which they are building, both published and unpublished.”

- To the best of our knowledge this study is a first in its field. Despite extensive literature searches we have not been able to find any studies that are directly related. Instead, we
have cited the most closely related previous studies in the introduction and discussion sections. We have revised the introduction to make the novelty of this study more clear and to explain the lack of discussion about directly related previous work.

REVIEWER 2: Jeffrey Grierson

3.1. “In the limitations sections it would be useful if the authors addressed issues around the completion of the questionnaire by people living with HIV/AIDS.”

- Thank you for this suggestion. We have expanded the methods and limitations sections to include a discussion of this issue.

3.2. “While the authors cite a number of papers that have examined the beliefs and practices of Muslim communities in Tanzania, none appear to cover directly comparable findings.”

- Please see 1.3 above.

3.3. “It would be useful for the authors to provide a rationale for not including other religious belief systems in the current study and perhaps to examine the utility of the current methodology for addressing these groups.”

- We have expanded the limitations section to discuss this issue.

REVIEWER 3: Sheryl McCurdy

3.1. “Change the stats and the cite on the religious divisions in Tanzania.”

- We have updated the demographics to more closely resemble the reviewer’s suggested distribution.

3.2. “Acknowledge that you are only sampling from that 30% of the population that is Christian.”

- We have revised the limitations section to explicitly state that “only the three main Christian denominations in Tanzania were included in this exploratory study.”

3.3. “Redo analysis by sex.”

3.4. “Redo the tables by sex.”

- We added gender breakdown in Table 3. The results are reported in the Results section. Gender was already included as a demographic factor in the analysis in Tables 4 and 5.
3.5. “Redo analysis of disclosure intentions by sex without collapsing the two measures (disclosure to pastor, disclosure to congregation) into one.”

- Our data analysis shows that no new result of statistical significance is obtained by considering each disclosure measure separately. We report results for only the joint measure.

3.6. “p. 16, 2nd para, this whole para needs to be reconsidered and rewritten with new data after we know more about gendered responses to these questions.”

- The new gender breakdown analysis does not warrant rewriting this paragraph. The gender data are added to the Results section.

3.7. “p. 18, 2nd para, “This may suggest….” “This implies that getting tested facilitates disclosure intentions…” It could also be that other factors not measured account for ‘willingness to disclose” I think you are claiming too much here. Let’s see how this breaks down by sex, marital status, age and education, perhaps there will be more to effectively argue your point.”

- After accounting for gender, marital status, age and education, there is a statistically significant association between having tested for HIV and disclosure intentions. Therefore, while not a main conclusion of the paper, we believe this is an interesting connection to suggest.

3.8. “p. 18, 2nd para, last sentence, in parenths “(most like likely the majority of respondents who had been tested)” this is speculation. Drop the comment in parenths and maybe the whole sentence.”

- The comment in parentheses was dropped as per the reviewer’s suggestion.

3.9. “p. 19 mid para, last sentence “This suggests that disclosure to pastors or other members of the religious community can be important to ARV adherence. Disclosure to 'someone other than a health care provider' is not the same as 'disclosure to a pastor’. Even if someone disclosed to a pastor they might still be hiding it from a family member. If they don’t tell a family member they might need to hide their medication regime, which could limit their willingness to take and to be adherent to ARVs.”

- Disclosure to pastor and members of congregation falls under disclosure to ‘someone other than a health care provider’. Hence we believe that the comparisons and discussion in this paragraph are relevant to the topic of the paper.
3.10. “p. 21, Last line. This is a non-sequitor (sic). Drop it.”

- The reviewer is referring to the sentence “These results are consistent with a previous study of women in Ghana, which found that risky behavior (multiple sexual partners, not using condoms) was more correlated with sociodemographic factors and HIV prevention knowledge than with religious affiliation (Takyi, 2003).” This sentence is found in the discussion section under the subsection Willingness to begin ARV treatment if HIV-infected.
- We believe that this sentence helps to explain and provide background to a key component of our findings: that sociodemographic factors, rather than religious factors, often determine what HIV prevention and treatment actions people will take. Since the reviewer did not make it clear why this sentence was “non-sequitor (sic)” we have chosen to leave it in the manuscript.

3.11. “Change the title to Christianity and HIV in Tanzania...”

- Although we agree with the reviewer that the study is focused on Christian denominations, we feel that the current title, “Religion and HIV in Tanzania: Influence of Religious Beliefs on HIV Stigma, Disclosure, and Treatment Attitudes” more adequately captures the scope of the study’s findings. The study addresses questions of HIV stigma, ARV knowledge, and general spiritual practices that are not specifically related to Christianity alone.
- We have updated several sections of the paper to more explicitly state that only the Christian population was sampled.

3.12. “Note the dominant ethnic groups in Arusha Region and in the rural area surveyed and that they are # out of 120 ethnic groups in the....[?]”

- We were unable to find reliable sources describing the ethnic distribution in Arusha town or the region of Babati that was surveyed. Although we agree with the reviewer that this information would be useful, we do not feel that the lack of this information significantly changes the interpretation of the results.

3.13. “Begin sentences with a word, if you have a number, spell it out.”

- Thank you for this correction. We have rewritten our sentences so that they do not begin with numbers.

3.14. “p. 22 second para, 4th line, start with “Several previous…and move the rest of the para to the literature review section of this paper. This paper doesn’t compare Christians to Muslims or animists, so it doesn’t do what those other papers did.”

- We believe that the original placement of this paragraph in the discussion section is appropriate. The discussion of previous studies about religion and HIV knowledge, which
the reviewer suggested moving to the introduction section, serves to compare the current findings with previous studies.

- Although the reviewer is correct in pointing out that our study did not compare Christians to members of other religious groups, the main point that we wanted to convey in this section of the discussion still holds—there were no significant differences in ARV knowledge between the three Christian denominations that were included in our study, but previous studies involving different religious groups have found that differences in HIV-related knowledge do exist between these groups.

3.15. “p. 9, line 4, put in quotes ‘fearing contact HIV transmission.’”

- Thank you for this suggestion. We have made the change.

3.16. “Note that the attendees at the Assemblies of God church participating on a Tuesday evening may be more devout group that other Assembly of God members who don’t attend Tuesday fellowship services.”

- We have updated the limitations section to highlight the possibility that respondents from the Tuesday evening fellowship service may not be representative of the congregation as a whole.

ADDITIONAL REVISIONS

- The citation format has been revised to match the BMC formatting guidelines. The table style has also been updated to match the guidelines.

Thank you very much for your time and consideration.

James Y. Zou
Yvonne J. Yamanaka