Reviewer’s report

Title: Seroprevalence of Transfusion Transmitted Infections among Blood Donors in Gash Barka Zonal Blood Transfusion Center, Barentu, Eritrea, 2014 through 2017

Version: 0 Date: 19 Sep 2018

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER COMMENTS: To view the full report from the academic peer reviewer, please see the attached file.

REVIEWER COMMENTS FROM REPORT: Overall I will score the authors 6 out of 10. The style and method were sound but there some issues in the results which can be attributed in part to the nature of the study. The authors should address this. Some statements in the discussion were not substantiated by appropriate references.

REQUESTED REVISIONS:

The total TTI reported was different from the sum of the individual TTI. Why the differences. Otherwise individualize the analysis for each TTI.

Abstract Results: "A high proportion of the donors..." The specific value of the proportion should probably be stated in brackets in front of each variable.

Introduction: end of last sentence of third paragraph - grammar issues. Should read "..... associated with important clinical diseases have been emphasized."

Methods: Write the meaning of NBTC in full

Results: sentence regarding Table 2. 15.3% is not visible on table 2. Table 2 has a different value. Please check your analysis and ensure the total in your prose and table are consistent.

Table 2 footer: Chi Squared is misspelled

Tables 3 and 4 column "Positive No (%)": This column should be removed from these tables. If you sum up the individual TTI, the total in some of the rows is usually greater than the number in the total positive because of double counting. Therefore it will be inappropriate to consider the TTIs together. The total positives in table 2 is different from that calculated on table 3. Why? otherwise you can highlight that an individual may have more than one TTI seropositivity as a footnote.
Analysis "Seropositivity and associated factors for infection": for reasons emphasized on table 3, it may be appropriate to do the regression for individual TTI or reconsider the analysis. The total positive on this table is also different from 2.

Table 5: The issues raised on tables 2-4 should be address before conducting this regression; otherwise conduct a different analysis for each TTI.

Discussion: Please provide supporting references for these statements: "blood safety is still a problem in SSA. In this regard, donor profiling and risk assessment for specific TTIs premised on the association between demographic and behavioural variables has been promoted"

Discussion - second to last sentence that includes "it is again our observation...a range of... practices... may predispose individuals in this population to HIV" This may be inappropriate since it was not the focus of your study and you have not cited any of your own data from this study as well as other references that would suggest such.

Conclusion - "the data also implicated preponderance of unsafe sexual practices among rural dwelling donors with limited education." Sexual practices were not explored in this study and there is no evidence in this work to suggest any unhealthy practice in the population studied.

ADDITIONAL REQUESTS/SUGGESTIONS:
The result section should be revised to ensure consistency of the information expressed in the prose and in the table. There is disparity in the total TTI and the sum of the individual TTI. Explanation should given or the analysis individualized for each TTI alone. Statement in the discussion must be based on facts with references cited. Conclusion should be within the scope of the findings. Grammatical and spelling errors throughout should be addressed.

The reference style is not uniform in the bibliography - please follow journal guidelines

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

No

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

No

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

No
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.

Not relevant to this manuscript

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

Needs some language corrections before being published

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