Reviewer’s report

Title: The HIV epidemic and prevention response in Tigrai, Ethiopia: A synthesis at sub-national level

Version: 2 Date: 25 March 2014

Reviewer: Matilu Mwau

Reviewer’s report:

Dear Editor

Thank you for the manuscript “The HIV epidemic and prevention response in Tigrai, Ethiopia: A synthesis at sub-national level” which I have now reviewed.

This is a sound manuscript that describes the HIV program in Tigrai, Ethiopia, in some detail.

The questions are well defined
The methods are appropriate and well described.

I would like to bring to the foresome issues that must be addressed before a final decision is made.

Section A: Major compulsory revisions
1. The data and the discussion sections need to be rewritten. The data are presented both as hard data and also as discussion, all in the same section. For instance, the “HIV Prevalence and trends in Tigrai” section, para 2, reads as follows:

EDHS 2011 data demonstrates a slight decrease in overall adult HIV prevalence in Tigrai over the past six years but this was not statistically significant (1.8% in 2011 vs. 2.1% in 2005, odds ratio (OR) 0.9, p=0.73)
and in both the male and female population (females: 2.2% in 2011 vs. 2.6% in 2005, OR 0.9, p=0.78; males 1.3% in 2011 vs. 1.6%, OR 0.9, p=0.88). There were no significant differences between HIV prevalence in Tigrai and the rest of Ethiopia (Tigrai: 1.8% 95% confidence interval (C.I.) 1.4-2.4 in 2011;
Ethiopia excluding Tigrai: 1.4%, 95% C.I. 1.2-1.7 in 2011). According to the most recent ANC sentinel surveillance data (with several data points to enable trend analysis unlike DHS) there has been a continuous decline in the prevalence of HIV in both urban and rural areas in
Tigrai (urban: 14.9% in 2001 to 5.0% in 2009; rural: 5.2% in 2001 to 1.3% in 2009) [15].

This paragraph combines both data and discussion elements. This is a problem that recurs throughout the manuscript. I recommend that the results and discussion sections be rewritten, so that hard data remain in the results section while the discussion section is strengthened and guided by the results.

2. Several assertions are made without references or further substantiation. These need to be referenced or removed. These assertions are generally favourable to the program in Tigrai. For example, in page 13:

These efforts are likely to have contributed to the higher levels of comprehensive knowledge about HIV and AIDS in Tigrai which is above the national average...

What is the national average? Is a significant difference demonstrable? Such assertions are especially problematic given that the Tigrai Health Bureau and Tigrai HIV Prevention and Control Office commissioned this study.

Section B: Minor revisions

1. There are a few typographical errors. These can be corrected using a spelling and grammar tool in any wordprocessor.

If these issues are addressed, the manuscript can be published.

Thank you

Matilu Mwau
Nagasaki, Japan, 25th March 2014

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests