Reviewer’s report

Title: Reviewing progress: 7 year trends in characteristics of adults and children enrolled at HIV care and treatment clinics in the United Republic of Tanzania.

Version: 1 Date: 19 April 2013

Reviewer: Simbarashe Takuva

Reviewer’s report:

The research question posed by the authors is of good scientific merit and vital for understanding the epidemic in Tanzania and Zanzibar. Overall, a large number of adults and children accessed HIV care and treatment, demonstrating successful establishment and expansion of HIV care and treatment programs in Tanzania. The findings could also offer useful insights into similar epidemics in sub-Saharan Africa. This is a relevant and important paper in the field.

However before the Editors consider publication, the following revisions should be addressed;

Major compulsory revisions

Introduction – none

Methods

These are more of clarifications.

1. A total of 127 CTCs located in the North-West of Tanzania, the East coastal regions and Zanzibar are analysed. Perhaps it would be useful to include a sentence that states the prevalence of or the burden of HIV in each of these districts. Is it the same, is it different? This will give a greater understand in understanding the effectiveness of the ART roll-out including coverage over this period.

2. Under Data Analysis. You do mention that treatment decisions were based on 2006 WHO guidelines. In deciding the time categories to analyse data i.e. 2005-2007 vs. 2009-2009 vs. 2010-2011; was this based on some criteria i.e. changes in Tanzania guidelines or CD4 eligibility criteria. It is important for this to be clear upfront for if the criteria were different then – the analysis, discussion and implications may be different. If this was based on convenience – make it known.

3. Again state if eligibility criteria for ART initiation changed or remained the same for the analysis periods - 2005-2007 vs. 2009-2009 vs. 2010-2011.

Results

1. A total of 62,801 patients were enrolled at the 44 clinics. Were there patients excluded due to missing data. Please confirm this, and if they are worth analyzing to understand any extent and direction of potential bias that may be
introduced.
2. Missing data issue becomes clearer further down the results section. The authors need to reassure the readers that this missingness was likely random i.e. CD4 count at ART initiation could not be ascertained in at least 20% of patients.
3. Figure 1 data could be (discretionary) improved by presenting proportions rather than absolute numbers. Proportions of those enrolling for ART, the denominator being numbers projected to be in need of ART. This may illustrate improving coverage more reliably.

Discussion
The discussion and conclusions are well balanced and supported by the findings. However;
1. The authors clearly need to acknowledge the limitation of potential selection bias that might have been introduced by missing data. Possibly as suggested CD4 measurement may have been omitted in very ill patients (i.e. most patients without CD4 were stage III or IV) – in addition I would like to speculate that these clinical records could have been updated well after initiation (i.e. patient data captured retrospectively rather than real time) hence missing data for the sickest who might have had higher mortality and loss to follow up. Hence CD4 trends need be interpreted with caution.

Minor essential revisions
Introduction
Methods
1. Write out ICAP in full then use abbreviations thereafter.
2. The first sentence under site data: {Anema, #84; Saito, #132}. Are those references ?. If so, please use the correct format.
3. Under Data Analysis: It is noted “ The CTC2 data” .....Please be clear that CTC2 means Patient Record Forms. It will not be clear what the authors will be referring to, to a reader without access to TZ protocols.
4. Ethical approval: by Columbia IRB, please write in full - Columbia University IRB
5.
Discussion
1. Please fix the referencing throughout i.e. Ahonkhai, #129

Discretionary revisions/additions
Discussion
The authors state....“the proportion of children in the study population did not increase significantly over time.....”. The suggestion of strengthening scale up of EID is great.! However, is there not a possibility that the success of PMTCT
programme effectiveness (not measured here but can be inferred from increased / expanded enrollment) might be cancelling out any increases in increased paeds uptake (and bear in mind after age 14 years we lose them into the adult group ?)

Level of interest: An article of importance in its field

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