Reviewer's report

Title: Treatment outcomes in HIV-infected adolescents attending a community-based antiretroviral therapy clinic in South Africa.

Version: 1 Date: 4 October 2011

Reviewer: Marcos da Silva

Reviewer's report:

Report - paper BMC ID 2019925599554998

When assessing the work, please consider the following points:

1. Is the question posed by the authors well defined?

Yes, the question is well defined and its background well justified. Additionally, the question proposed by the authors is very timely, since HIV-infected adolescents, either vertically or behaviorally infected, are a vulnerable group, with estimated high rates of adherence failure and abandonment of treatment. It’s the third African study approaching outcomes in adolescents under ARV, and the one with the longest follow-up.

2. Are the methods appropriate and well described?

The methods are well described and appropriate to fulfil the objectives. It is a cohort study dealing with outcomes research (Evidence level: 2c).

3. Are the data sound?

Yes.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?

The discussion is somewhat succinct, but approaches all main issues which were part of the aims of the paper. Another factor is the paucity of similar reports within the African scenario.

6. Are limitations of the work clearly stated?

Yes.
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes

8. Do the title and abstract accurately convey what has been found?
Yes

9. Is the writing acceptable?
Yes, with a few remarks:

Page 4, second line of second paragraph: change “adolescents” for “adolescence”

On page 5, first paragraph, please suppress “was”, as follows below:
Data was analysed in these two age groups were based on age at ART initiation and patients were not switched between age groups during follow-up.
The criteria for the use of parentheses and brackets should be reviewed for all sections, due to several inconsistencies.
I would suggest the use of no more than two significant decimal digits for p values, with the exception of “p < 0.001”.

Please make your review as constructive and detailed as possible in your comments so that authors have the opportunity to overcome any serious deficiencies that you find and please also divide your comments into the following categories:
• Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

• Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

ABSTRACT
The background section starts with:
“ Provision of antiretroviral therapy (ART) for adolescents living with HIV infection presents challenges especially with respect to adherence” – however, the study does not address adherence to treatment as a specific outcome. I think the authors should start with a sentence like in the first paragraph of the introduction.

METHODS
The outcome “virological suppression”, which is described only in the results section, should be defined in the methods section.

DISCUSSION
I suggest to the authors to start the discussion with their main result, which is the lower rate of virological suppression and higher rate of virological failure in adolescents. The topic of mortality, which was discussed first, showed no significant differences.

This way, in the discussion, paragraphs 3 and 4 should be reordained to 2 and 3 and paragraph 2 should be turned into paragraph 4. And the second sentence of paragraph 1 should be transferred with adaptations to the beginning of the new paragraph 4.

FIGURES

Figure 1, and also results section: Since adolescents showed a higher risk of virological failure, I understand that the hazard ratio presented should be inverted (2.04; 95% CI 1.11 – 3.84).

• Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

I do not see the need for any major compulsory revision.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests