Reviewer’s report

Title: What happens to ART-eligible patients who do not start ART? Dropout between screening and ART initiation: a cohort study in Karonga, Malawi

Version: 1 Date: 2 June 2010

Reviewer: Sara Lodi

Reviewer’s report:

The ART program in Malawi aims to identify patients eligible to start ART in order to reduce mortality in HIV infected individuals. The authors focus on the specific group of individuals who were considered eligible for ART initiation based on WHO stage in the ART clinic at Karonga District Hospital but did not go back to the clinic for the scheduled ART initiation appointment. They explore risk factors associated with drop out and track some of these individuals beyond the clinic exploring reasons for the drop out and assessing their survival.

They find that eligible individuals who drop out before starting ART represent a substantial proportion of the patients eligible to initiate ART (15%). Of these more than half of the patients have died before the scheduled appointment to initiate treatment. Also, they found that factors such as MUAC and difficulty in dressing may provide useful and quick screening indicators to identify sicker individuals who are likely to benefit from priority ART initiation when CD4 record is not available and eligibility is determined using WHO stage as in most resource limited settings.

The research question is relevant and these results are useful to evaluate ART program in Malawi and in general in resource limited settings. However, I invite the authors to address the following issues:

Major revisions

1) Method section. Second paragraph. Socio-demographic and clinical data. Please explain in more details which information was requested and which variables will be explored in the analysis. What do the authors mean by “treatment outcome”? It becomes clear in the result section that this is death, but should be clarify at this point. How was the death status ascertained? From reporting of relatives?

2) In the introduction, it is stated that individuals were eligible for ART in Malawi if they were assessed to be in stage III/IV or stage II with a CD4<250 cells/mm3. However, in the Karonga District Hospital no CD4 tests were available and eligibility to ART initiation was determined only using WHO stage. The authors should discuss whether having information on CD4 could have been helpful in this study to identify sicker patients and if these results are generalisable to the other clinics in Malawi where CD4 testing was available.

Furthermore, in footnote in table 1 says that “Six had low CD4 count recorded”.


This contradicts the statement that CD4 tests were not available at the hospital laboratory. Please clarify.

3) Method section and Table 1. Please clarify how the final multivariable model in Table 1 was obtained (eg, step-wise selection, etc). For instance, why occupation and BMI were not included in the final model?

4) It is not clear how the variable timing of ART initiation was classified and the first 2 categories overlap. Did the authors mean 0-7 days, 8-30 days, +31 days, for instance? If so, why did you choose these categories?

5) Discussion. First sentence: “biasing outcome” not clear. Which bias and which outcome?

6) Were there children included in the study? If so, how many? If so, is it reasonable to use age<30 as the lower age category?

Minor

7) Pag 8. The sentence “The significant positive association between drop out and length of delay from screening to the initiation appointment is consistent with a Cambodian study that showed higher loss to follow-up in early years of the ART programme when access to ART limited” is not clear and would benefit from rewording.

8) Introduction: add cells/mm3 after CD4count<250.

9) Pag 6. Second paragraph of the Result section. "A composite indicator of any report of difficulty with activities ... age or sex". Is this the variable "disabilities" in Table1? If so, this should be stated more clearly in the footnote of the table.

Discretionary revisions

The authors conclude that MUAC & difficulty in dressing could be used to identify sicker patients. However, wouldn't be more recommendable to prioritise treatment initiation based on WHO stage and/or CD4 at enrollement? Did the authors expect to find no role of WHO stage?

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’