Reviewer's report

Title: Excellent outcomes among HIV+ children on ART, but unacceptably high pre-ART mortality and losses to follow-up: a cohort study from Cambodia

Version: 2 Date: 19 February 2009

Reviewer: Margaret May

Reviewer's report:

General comment

1. Not much data is available on the success of recent scale-up programs providing care for HIV+ children and what has been reported has mostly concentrated on on-treatment mortality/survival. It is important to monitor programs in different geographical locations as outcomes may differ substantially depending on setting. Therefore this paper is reporting important data on both pre and post treatment outcomes in a paediatric HIV care program in Cambodia. The conclusion of the paper that both pre and on treatment deaths and loss to follow up are important indicators of program success and should be monitored is important for improving future HIV service provision.

Major compulsory revisions

2. P7 Methods: KM analyses were used to estimate survival probabilities of children not yet started on ART. This analysis could be biased because there are competing events: death and treatment. So if you do a KM with the outcome death and censor on loss to follow up and censor on start of treatment and a 2nd KM with outcome “start treatment” and censor on loss to follow up and death, the predicted probabilities of the 2 endpoints may well add up to more than 1. The KM analysis assumes that those who are censored are similar to those followed up, but this is not the case for censoring on start of treatment. A better approach is to use the cumulative incidence function (similar to KM, but takes into account competing risks). The CIF can be estimated in Stata using the stcompet function. (1)

3. P7 Results: There is a confusion between first contact or enrolment in the care program and eligibility for ART. Does “baseline” refer to first contact (the word “initial” is also used)? Or when eligibility for treatment has been established? It is important to distinguish the date of registration and the date of eligibility for treatment (established by the criteria).

4. Table 2 (and figure 2) The death rates on ART look a bit odd – usually the death rate is highest immediately after starting ART, but in this cohort deaths are greatest in the middle time period 90-180 days. Could you comment on this? Were all deaths on ART counted, or were deaths within, say 2 weeks, not counted as on treatment?
Minor essential revisions

5. P9 The authors hint that access to care was an issue in those lost to follow up before accessing ART. Could you give nos (%) who lived outside the province for both those lost and not lost to follow up? Also compare other variables similarly.

6. P10 line 8 typo death rate not ratio.

7. Figure 1 I think it would be helpful to show extra information on whether children were eligible for ART in the left branch.

Discretionary revisions

8. P5 How do the new WHO criteria used after 2006 differ from those described? Please describe in text as well as reference.

9. P11 discussion para 1. Is there now some guidelines on treating pediatric HIV and TB co-infection that you could cite?

Reference List


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'