Reviewer's report

Title: Introducing a multi-site program for early diagnosis of HIV infection among HIV exposed infants in Tanzania: Lessons from the first 6 months of implementation

Version: 2 Date: 17 February 2010

Reviewer: Lisa Frenkel

Reviewer's report:

Overall:
- This article’s title suggests that reporting on “lessons learned”, however, the majority of Results gives demographic data of program, with little attention to “issues” and problem solving process. Also, there are too many project-specific abbreviations, and lingo makes it a struggle to read (e.g., EID seems to stand for a Program as well as for individual infected infants; also, a specimen might test (+) for HIV DNA PCR, however, and infant is then “an infected infant” rather than “positive infant”).
- Would be helpful to others who are establishing programs if provide a table of processes critical for an effective program; then address approach for success and/or issues encountered with each.

Abstract:
- Background: Add objective
- Conclusions – what does “successful” refer to? Were there predetermined criteria for “success”; how did the project “inform”. Would modify abstract to report “lessons learned” rather than just the # tested and those that returned for results; e.g. was there lab QA; did the lab give accurate and reproducible results; was the lack of follow-up investigated? If not how did one learn lessons?

Text:
- page 4, bottom, HEI seems incorrect, do you mean “infected”?
- multiple minor errors throughout
- p.9 would explain more about “registration”; where? What data collected? Procedure if no telephone?
- p.9 Would explain “key information”
- p. 10, Results – when mention that “untested were mostly <6 weeks of age” would remind reader that only #6 w.o. were eligible for testing by SOP; similar for SMX
- p.12, give timing of cohort study, is additional data available on % of infants receiving #6wk post weaning serology at >18 months of age? Also, were 3/43 infants with Ab (+) actually HIV-infected? Confirmed by HIV DNA PCR? (In Discussion it is said that these are “infected”; might be good to include how this
was confirmed, or that were presumed “infected”.

- P. 14, implies that 4-week turnaround considered acceptable for HIV DNA PCR results – is this arbitrary? Seems like a long time for such a high incidence infection with high mortality.

- P. 14, as written suggests that uncertain if more parents of HIV DNA PCR (+) returned for results because of staff contacting them; more details and discussion of how to find and tract clinic staff success may assist other programs.

- Discussion- there is no mention of others manuscripts on establishing programs, including catchment, DBS transport, or potential laboratory issues.

Table:
- suggest change “test PCR positive” to more precise language “infant specimens with HIV DNA detected by PCR”
- suggest changing “sex” to “gender”, and “missing” to “no data” or “data missing”
- suggest defining abbreviations in footnotes
- clarify “age at registration”, does this refer to age that HIV DNA PCR specimen collected?
- Overall Table would better relay information to reader if parameters were more precise/detail, as sometimes reviewers guessed what was implied

Figures:
- suggest expanding legends to briefly discuss findings so reader does not need to comb article to interpret data and learn caveats.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**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’