Reviewer's report

Title: Missing HIV prevention opportunities in South African children

Version: 2 Date: 26 September 2014

Reviewer: Atana U. Ewa

Reviewer’s report:

GENERAL COMMENTS

The study is good and relevant. The data is sound but the presentation of the manuscript is poor and needs major corrections.

MAJOR COMPULSORY REVISIONS

1. The title and abstract don’t accurately convey what has been done or found. I suggest modifying the title to 'Missing HIV prevention opportunities in South African children - A 7 year review'

2. The methods are not well described eg who are the study subjects? Were the subjects the HIV exposed children or their caregivers or mother-infant pairs?

3. Discussion is balanced, relating and comparing results of study to published literatures.

4. Conclusion is not well balanced and does not address objective of the study. See suggestions in detailed report.

MINOR ESSENTIAL REVISIONS

- The author should be consistent with the choice of the terminology ‘Paediatrics’ or ‘Pediatrics’.

- Figure 1 has no label.

- Figure 2 has 8 variables but 9 bracket labels in stage 2 (antenatal) component of missed opportunities.

DISCRETIONARY REVISIONS

- What is the usefulness of Figure 1 over figure 2? Delete if there’s no additional use.

- Where is the questionnaire used for caregivers’ structured interview and data collection from medical records?

SPECIFIC COMMENTS

ABSTRACT

In Background, first paragraph, line 18, I suggest changing "The prevention of mother-to-child transmission program (PMTCT) in South Africa …" to “The
prevention of mother-to-child transmission (PMTCT) program in South Africa…”

- In line 20, I suggest revising the sentence “The study objective was to identify missed opportunities for prevention of perinatal HIV transmission using the four PMTCT stages outlined in National Guidelines” to “The study objective was to identify missed opportunities for prevention of mother-to-child transmission of HIV using the four PMTCT stages outlined in National Guidelines.”

In Methods, line 22, I suggest revising “This descriptive study enrolled HIV-infected and HIV-exposed children in…” to “This descriptive study enrolled HIV-exposed children in…”

In line 24, revise “…and review of medical records and HIV results.” to “…and review of medical records, including HIV results.”

What information in the clinical history and medical records were obtained? How were data analyzed and what was used for comparison between the two groups?

Results: In methods, enrolment was for HIV exposed children from June 2009 to May 2010. And in results, all children were born between 2002 and 2009. The authors should explain who is an exposed baby and why take one year to interview and review records? How best can this type of study be described?

Again in methods, children were enrolled into the study while in results, caregivers were enrolled. Who were the study subjects? If mother-infant pairs were enrolled, then authors should be explicit and consistent throughout.

BACKGROUND

I suggest revising first sentence in second paragraph, line 50 and 51 to “…for women with severe disease. Severe disease was classified as World Health Organization (WHO) stage 4 disease or CD4 count <200 cells in April 2004 as part of the…”

Second paragraph, lines 59 and 60, I suggest revising to “…and the addition of daily nevirapine prophylaxis for breastfeeding infants [6].”

METHODS

Comments have already been addressed. In addition, I suggest revising paragraph 1 line 72, to “Caregivers of HIV-infected and uninfected children in care at…”

RESULTS

The last sentence, second paragraph (lines 103 and 104) is vague. The authors should explain scientifically the siblings’ result.

-No reference is made to figure 1 in missed opportunities. My suggestion to delete has already been given.

DISCUSSION

In paragraph 7, lines 257 and 258, the authors should explain the types of HIV
testing done at 6 weeks, after weaning and at 18months.

CONCLUSION

Comments already addressed.

The authors should draw conclusion from the study, taking note of the title, aims and objective and the result and not from published literature. I suggest the following revision:

This study has identified missed opportunities for HIV prevention among South African children using the four PMTCT stages outlined in the National Guidelines. The data has demonstrated significant improvements in antenatal PMTCT enrolment, known maternal HIV diagnosis at delivery, mother-infant ART interventions and infant HIV diagnosis, indicating PMTCT focus areas that have succeeded. A lot still needs to be done to improve preconception HIV services linked to family planning services, TB screening in pregnancy, HIV disclosure, psychosocial support, postnatal care, including infant feeding support.

**Level of interest:** An article of outstanding merit and interest 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'