Reviewer's report

Title: Gestational mid-upper arm circumference and birth or early infancy anthropometrics in HIV-exposed and unexposed infants: a prospective cohort

Version: 1 Date: 22 February 2015

Reviewer: andreas chiabi

Reviewer's report:

- Major Compulsory Revisions

1. The title does ties poorly with the contents of the article or the objectives of the study. If focus is on MUAC, what was the use of the other anthropometrics in the mother?

2. The Abstract should take into consideration the modifications in the final corrected text.

3. Line 83: It should be well precised here, if the use of MUAC especially, and triceps skin fold to assess the nutritional status in pregnancy is a WHO recommendation or any scholarly society; if not, have other studies confirmed validity of MUAC in assessing the nutritional in adults or pregnant women??

4. Line 85: Hb is not anthropometry

Methods

5. Line 100: What was the rationale for the GA limit of eligibility < 34 weeks? What happened to those pregnancies that did not go to term? Enrolling them would mean enrolling extremely premature neonates who will not have had their catch up growth pattern and normal anthropometrics as for term neonates at birth and by 6 months the duration of the study.

6. Concerning ethics, which interventions and health care services were offered to women found to be malnourished and enrolled in the study.

7. Lines 103-104: The sentence "For every HIV-positive woman enrolled, the recruitment goal included two HIV-negative women", is ambiguous and unclear. This should be clarified.

8. Is this study a case-control study or not? The study design should be mentioned and stated in the Methodology

9. How was the sample size determined??

10. Line 104: At what stage or GA were women considered to sero-negative? At enrollment (<34 weeks)? if so there is a considerable bias, as some pregnant women can be sero-negative at early or mid pregnancy and get infected at late pregnancy.

Data collection

11. Line 128: Maternal anthropometric measurements were taken measured at
what gestational ages?

12. Line 141: What was the MUAC cut-off for malnutrition in the pregnant women, and infants (considering the GAs at birth) in this study?

13. Line 145: Define the other feeding operational terms: partial and predominant breast feeding

14. Line 213: Was any correlation established between MUAC, degree of immunodepression and the infant’s anthropometrics/outcome??

Statistical analysis

15. Line 164: replace the URL with the appropriate reference. I am not aware of the use of 'wasting' and 'stunting' in infants less than 6 months old. This should be clarified.

16. Lines 251-254: This should be discussed with other findings from other studies

17. Line 271: Reference??

Results

Precise how many seropositive and seronegative pregnant women were enrolled in the study

- Minor Essential Revisions

Under Background

1. Line 70: ……..the pregnant women

Results

2. Lines 189-191: report your results without any discussion nor justification. The discussion will be done later.

3. Line 194: Among those who….?

Discussion

4. Line 246: 6 months is not 'long term'

5. Lines 287: interventions

- Discretionary Revisions

I did not verify statistical analysis. This section should be reviewed by a statistician

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests