Reviewer's report

Title: Factors associated with HIV infection among children born to mothers on the Prevention of Mother to Child Transmission programme at Chitungwiza Hospital, Zimbabwe, 2008

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Reviewer: Kwasi Torpey

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The paper discusses factors associated with HIV infection among children born to mothers on PMTCT program in Chitungwiza Hospital in Zimbabwe, 2008. Generally the information in the paper seems out of date as it discusses the use of single doses Nevirapine as an intervention. There are several areas within the paper that must be revised to make it publishable.

Major compulsory revisions
1. The 2nd paragraph of the Background needs to be properly referenced. ie the Joint United Nations Program on HIV/AIDS (UNAIDS) reports.............. In addition, subsequent sentences eg It is believed that about two thirds........... should be referenced
2. The background will be stronger if the authors present an overview of HIV in Zimbabwe briefly discussing prevalence, burden of disease and the national response. Most of the information provided on PMTCT are very generic and not specific to Zimbabwe
3. Page 5, Paragraph 2: Information on Chitungwiza Hospital and the services provided will be better under Study context under the methods section.

Methods
4. What do the authors mean when they say someone is on a PMTCT program? Is it receiving maternal or infant prophylaxis or both? Or is it receiving testing and counseling and getting results?
5. What is the scientific basis for the determination of sample size of 120?
6. Limitation of study can be mentioned after discussion segment

Results
7. Median age for the children was 17(Q1 =12 Q3=27) for cases and 24 for controls. What is the unit? Months or years?
8. Maternal factors: Median CD4 for cases 180 what about controls?
9. NVP adherence: How high is 'high'? What about the adherence in both mother and infant?

Risk factors: No. Table 3 in the manuscript
10. Multivariate analysis: All the variables that were significant at 0.25 level was
included ...... If 0.25 is used as the level of significance, then the likelihood of events occurring by chance is very high

11. Multivariate analysis: Table 4 shows 4 variables........... There is no table 4 in this paper

11. There two major factors driving HIV infection in infants and these are ARV prophylaxis and breastfeeding. This paper discusses breastfeeding but is almost silent on the prophylaxis. It will be helpful if more information is provided on the maternal and infant prophylaxis in a tabular form

**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 I have no competing interests