Reviewer's report

Title: Non-Adherence to the Single Dose Nevirapine Regimen for the Prevention of Mother-To-Child Transmission of HIV in Bindura Town, Zimbabwe: A cross-sectional analytic study.

Version: 1 Date: 11 June 2009

Reviewer: elizabeth M Stringer

Reviewer's report:

General
UNGASS goals were for a 50% reduction of perinatal HIV by 2010. For this to occur, PMTCT services would need to be universal with all women receiving at least single dose nevirapine. PMTCT coverage in sub-Saharan Africa current is at 18%. This paper addresses an important and often not addressed problem of PMTCT which is that of non-adherence to PMTCT therapy. This paper also offers up some simple interventions which could be used to improve coverage. The language in the body of the manuscript can be tightened and the discussion shortened.

Title
The title is fine and adequately addresses the topic.

Abstract
I would suggest deleting the first conclusion: educating the girl child. Education is very important, however, in this situation a better conclusion would be that women who are noted to have less education in ANC need better education about taking PMTCT regimens possibly through simpler tools. This is discussed in the manuscript.

Introduction
The authors do not provide a reference for the third paragraph in the introduction. Is this a personal communication? Also, were there only 65 HIV infected women who delivered in Bindura Hospital between January and May 2007? If so, more description of the area in which this hospital is located is needed and the total number of deliveries per year. Do the seven satellite clinics provide PMTCT and conduct deliveries or refer women for delivery at Bindura Hospital?

Methodology
How was the sample size calculated? Was this a sample size of convenience? The authors need to describe in more detail how women were chosen for the survey. Were these women presenting for their six week check up? To the clinic because their infants were ill? How did the authors know that the women were HIV infected?
I would also like to know the total number of women who presented for a
postnatal check up during the time period between March and July 2008. Did women give informed consent for the questionnaire?

Results

The authors should describe all demographic characteristics age, marital status, education, and employment status briefly in text. The main issue is with the terminology and organization of the results section. The authors need to be more specific on the definition of complete adherence so that the readers can easily distinguish this from maternal non-adherence and infant non-adherence. Additionally, it seems that the authors switch back and forth between the paragraphs in their presentation of results for “complete coverage,” “maternal adherence” and “infant adherence.” I would consider grouping paragraphs according to these different categories. The authors might want to consider placing sub titles in the text for complete adherence (mom and infant) and then maternal adherence and infant adherence.

Additionally, adherence to maternal nevirapine can be interpreted in a variety of ways. For example, of the 212 HIV infected women who were interviewed, only 84% were actually given NVP. 34 women or 16% had no choice but to be non adherent. The authors do not differentiate between these women and women who were given the nevirapine, but did not ingest it. This needs to be taken into account for the analysis and addressed in the discussion.

Fourth paragraph, I would suggest using a different word than stratify since later in the manuscript the authors perform a stratified analysis.

Discussion

I would suggest shortening the discussion.

In the first paragraph, last sentence, the authors should reference Stringer AIDS 2005, 19:1309–1315 which does address combined mother-baby pair coverage.

Tables

Table 1 I would suggest putting the total column first and having p values to show any differences between the groups.

Table 3 is difficult to read. I would suggest removing the yes /no and presenting only data for the yes rows.

Minor:

There are no page numbers.

In the methodology section paragraph 4, change consumption to ingestion.

Level of interest: An article of importance in its field

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'