Author’s response to reviews

Title: Vitamin A deficiency during pregnancy of HIV infected and non-infected women in tropical settings of Northwest Ethiopia

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Author's response to reviews: see over
Dear Editors,

I would like to thank you for the valuable comments regarding the manuscript entitled ‘Vitamin A deficiency during pregnancy of HIV infected and non-infected women in tropical settings of Northwest Ethiopia’.

Please find below the responses for the editors comments and the reviewer.

**Editorial comments**

1. The sample size for pregnant women they have 423 with 10.4% HIV prevalence versus 55 non PW with 54.5%. The sample size for non PW is quiet small compared with PW and their HIV prevalence is much higher and can influence the results. The overall HIV prevalence in Ethiopia is around 1.6%, so these prevalence are much higher.

   Indeed, the sample size of the two groups is incomparable and the prevalence rates are higher. However, the prevalence of HIV among pregnant women and apparently health voluntaries blood donor women is in agreement with the national and regional (local) HIV prevalence among these groups during the data collection time (2005). The HIV prevalence at Gondar Health Centre (ANC surveillance Site) was 15.1%, 18.3%, 13.9% and 10.3% in 2001, 2002, 2003 and 2005, respectively (AIDS in Ethiopia, 6th Report, 2006; HIV / AIDS in Ethiopia An Epidemiological Synthesis, 2010). According to the AIDS in Ethiopia, 6th report, the overall unadjusted HIV prevalence among 28,247 pregnant women was 5.3% (9.5% at urban sites and 2.2% at rural sites).

   On the other hand, the prevalence of HIV among blood donors was was found to be high (54.5%). However, the prevalence of HIV among the whole (both male and female) during the data collection time was about 6%. We have recently reported relatively a low prevalence (6.6%, 51/769) rate of HIV among female blood donors from the same institute (BMC Infectious Diseases 2010, 10:111). For example in our study mentioned above, in 5 years time we have found only 769 female blood donors from a total of 6361 consecutive blood donors (12%). Thus, due to the fact that females are more infected than male by HIV and the low sample size of the controls might have falsely inflated the prevalence of HIV among the blood donors in this study.

2. The study was done in a hospital but is not very clear how many PW or non PW were outpatient or inpatients. It seems that many of the PW could be from the ANC clinic and perhaps the non PW were in patients. The fact that they have such high prevalence seems possible that many are hospitalized with advance HIV infection, and the different stages of HIV infection may affect VAD.

   Yes, the study was conducted in Hospital (Gondar Hospital). And, all of the 423 pregnant women were attending their routine ANC follow ups as out patients. The non pregnant women were also apparently health women blood donors who have visited the University Hospital Blood Bank during the actual data collection time.

   The other editorial requirements were also corrected and indicated in the text.

**Reviewers comments**: The reviewer comments are corrected and highlighted in the text by red.