Reviewer's report

Title: Effect of maternal vitamin D3 supplementation on maternal health, birth outcomes, and infant growth among HIV-infected Tanzanian pregnant women: study protocol for a randomized controlled trial

Version: 0 Date: 17 Jul 2017

Reviewer: Felix Caballero

Reviewer's report:

I have finished the reading of the manuscript entitled "Effect of maternal vitamin D3 supplementation on maternal health, birth outcomes, and infant growth among HIV-infected Tanzanian pregnant women: study protocol for a randomized controlled trial". The authors have adhered to the SPIRIT checklist for protocols, according to the journal guidelines. The randomized controlled trial is focused on the effect of maternal vitamin D3 supplementation on maternal and child health outcomes, and the study has been conducted among HIV-infected pregnant women in Tanzania. I think it can be considered for publication in TRIALS after addressing the following issues:

- Inclusion criteria are mentioned in the 'study population' paragraph, but is there any specific exclusion criterion in this study?
- The formula used for estimating the sample size needed, should be included or referenced.
- Some specific information about the instruments employed to assess depression, anxiety, social support, and physical activity, should be provided, adding references if needed.
- The Discussion should mention how will be managed the potential problems found during the recruitment of participants or in the data collection.
- Since the number of participants is not being provided in any of the cells comprising the Figure 1, maybe the 'n's could be deleted.

Minor comments:

- At the end of p.6, you have missed '(j)' when you are enumerating the effects of maternal vitamin D3 supplementation regimen.
- There is a typo in line 373: "We will use the use the log-rank test to test…".
- In the 'Trial status' sentence, the status of the recruitment should be updated..

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