Reviewer's report

Title: HIV preventive behavior and associated factors among mining workers in Sali traditional gold mining site Bench Maji zone, Southwest Ethiopia: A cross sectional study.

Version: 2 Date: 24 April 2014

Reviewer: Willemijn Mathilda Vermeer

Reviewer's report:

This is a very interesting paper on an important topic. The Health Belief Model is used as a conceptual framework, which is based on a theoretical framework.

Major Compulsory Revisions

- The language is often incorrect and unclear. The paper needs to be thoroughly checked for language, spelling, and interpunction (make also a choice between UK and US spelling).

- I wonder about your outcome measure. Why did you choose for a combined outcome measure and how was this translated in the survey items? For instance, wouldn’t barriers or benefits differ between having only one partner or testing for HIV? Or were the items more generic? It would help anyhow if you could provide more information about the measurement instruments (one item per construct as an example for instance).

- Would it be possible to run your analyses on subgroups? For instance, participants with one sexual partner (testing whether they were tested before ceasing condom use) and participants with multiple sexual partners (condom use, regular HIV testing)?

- In line with the previous comment. In your Discussion you state multiple times that an explanation for the findings (and differences in findings compared to other studies) might be the combined outcome measure (line 242/243 and line 258/259). This is something that you could easily check in your data and describe in your paper.

Minor Essential Revisions

Abstract

- Please specify what is meant by HIV preventive behaviours and associated factors (line 34).

- The sentence The cut-off value.. (line 40/41) can be removed.

- Please explain the direction of the association (line 47/48)

- You present new results in the conclusion (about consistent condom use and being engaged with one sexual partner)

Introduction
- It is unclear to me what you mean in lines 99-109. Is all this information necessary?

Methods
- Line 140: how was the questionnaire pre-tested?
- Could you provide more information about the instruments you used? Ans whether the items were directed at the individual or combined behaviours?
- Line 151: what was the cue to preventive action? And how was this measured?
- Statistical analyses: why did you chose to dichotomise your predictors instead of including them on interval level in your analyses?

Discussion
- The limitation about the social desirability bias certainly is worth mentioning. Did you do anything to reduce the likelihood of this bias? Were participants ascertained that their answers were private or that they would not be judged based on their answers? Anything else?

**Level of interest:** An article of importance in its field

**Quality of written English:** Not suitable for publication unless extensively edited

**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