Reviewer's report

Title: Contrasting predictors of poor adherence to antiretroviral therapy in two South African treatment programmes: a cohort study

Version: 2 Date: 2 June 2010

Reviewer: Paula Braitstein

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In general this manuscript has greatly improved. I have the following suggestions and comments.

Methods:

1. “Participants were referred to the study by clinic staff and we do not have information on the number of people starting ART in the clinic who were eligible for the study but refused referral.”

Do you at least have number of people starting ART in the clinic who were eligible? This would enable at least a basic comparison to elucidate any referral bias that may have existed. (Major essential if possible)

2. “Refusal to provide this information [follow-up contact information] was not an exclusion criterion.”

Did you consider this refusal as a co-variate? Perhaps a marker of stigma/disclosure issues. (Discretionary)

3. A comparison of those excluded vs. those included would be helpful (Discretionary)

4. Did you ask about toxicity/side effects and the impact of those on either adherence or treatment outcomes? (Discretionary)

5. What were the ART eligibility criteria in each of the programs? (Minor essential)

Discussion:

6. Given that the outcomes and predictors of them varied so much between the two programs, can we, and if so what and how, generalize from these findings? What can the rest of Africa learn from these data? (Major essential)

7. “Dissatisfaction with programme services was associated with poor adherence in both programmes.”

The definition of adherence should be in the methods, not the limitations part of the discussion. (Minor essential)
8. Were the questionnaires used identical in the community and the workplace programs? (Minor essential)

9. “It also may have reflected the surprisingly prevalent scepticism regarding the existence of HIV altogether [19], which could in part relate to lower levels of education or the rural origin of many employees, where alternative beliefs in disease causation may be more robust than in urban areas.”

I find nothing surprising about the prevalence of this skepticism given that this study takes place in South Africa. (Discretionary)

10. “Participants were referred to the study by clinic staff and we do not have information on the number of people starting ART in the clinic who were eligible for the study but refused referral. Therefore, we can not be certain that the prevalence of specific characteristics, or the proportion with poor treatment outcome, is representative of all patients in the clinic who were eligible for the study.”

Same comment as above about looking at the basic characteristics of the main cohorts to identify any potential referral bias. (Major essential)

Tables:

11. Table 2: Very difficult to read because it is so big. Suggest you break it up into Table 2a, 2b, 2c, and 2d to represent distal, intermediate, proximal, and biological variables. (Discretionary)

12. I would highly recommend a table for the multivariable models. (Discretionary)

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**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.