Title: Do the socioeconomic impacts of antiretroviral therapy vary by gender? A longitudinal study of Kenyan agricultural worker employment outcomes

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Author’s response to reviews: see over
Dear Editor,

Following receipt of your email from April 8, 2009 and the associated reviewer reports, we have revised our manuscript, “Do the socioeconomic impacts of antiretroviral therapy vary by gender? A longitudinal study of Kenyan agricultural worker employment outcomes”, for publication in BMC Public Health.

We have revised and edited the paper according to the reviewer recommendations and the additional comments included in your email. We attach at the end of this letter a point-by-point response to all queries, comments, and suggestions.

Regarding the comments from the Editor, we have copyedited the paper. We report the IRB approvals in the methods section. We have used the BMC template and instructions for authors to conform to the journal’s style.

In closing we would like to thank you and the journal reviewers for helpful comments and suggestions.

Sincerely,

Bruce A. Larson, PH.D.
Associate Professor
Do the socioeconomic impacts of antiretroviral therapy vary by gender? A longitudinal study of Kenyan agricultural worker employment outcomes

Authors’ Response and Revision for Reviewer 1 Report (Alan Whiteside)

Thank you for your report. In the following we summarize how we have revised the paper to incorporate your comments and suggestions. We will list the reviewer’s comments in italics and then our response.

I really enjoyed this paper. It is almost ready for publication in my opinion. I would suggest the following minor points be given attention.

1. It could be read through and edited by a professional editor, at the moment the writing is clumsy and does not flow. For example on page 12 ‘... from month 6 on ART no significant differences were observed after month 5 on ART...’. This is one of the most glaring examples and I believe a good edit by someone with fresh eyes would make the whole paper flow better. Obviously this is not essential but will make the difference between a great paper and an outstanding paper.

Thank you for the advice. We have completed a thorough edit of the paper.

2. Perhaps say a little more about the HIV/AIDS treatment programme introduced (page 6). Is this subsidising what the plantation was offering? At the moment it is too much ‘with one leap he was free’.

We have adjusted this comment, which is now included on page 7. In short, the plantation began to provide ART to workers and dependents as part of the ART roll out program in the region. PEPFAR provides the drugs and some off-plantation lab services (e.g. CD4 counts). The company provides the basic medical infrastructure (and staff). We intentional kept this description brief to avoid the risk of disclosing the name of the company (confidentiality is required in the IRB-approved research protocol).

3. Page 15 the conclusion repeats too much of what was said earlier.

In the first version, the initial two paragraphs of the conclusion summarized key results, which provided the transition to the remainder of the conclusion section. We have now revised the initial two paragraphs into one shorter paragraph to avoid repeating results while providing the transition to the remainder of the discussion.

4. Page 15 the conclusion ‘who may well have HIV-positive children or spouses to care for’, change that to might or revisit the argument, there is a great deal of data on discordant couples now which causes me to question the ‘may’
Because we do not have direct data on HIV status of other household members, we cannot say for certain if they do or do not. Thus, we simply use the word “may” to acknowledge the possibility (which we think is high but do not have adequate data to say for sure).

Page 16 the most striking point in the paper ‘some 50% would likely have died by the end of the period of observation’. This is so important say it more and say it earlier.

We now include this statement in the first paragraph of the paper.

Page 17 the very last sentence is said very boldly and i don't think there is evidence for it.

We have deleted the sentence. The paragraph is complete without it.

Generally excellent and thought provoking

Thanks very much for the review and advice.
Do the socioeconomic impacts of antiretroviral therapy vary by gender? A longitudinal study of Kenyan agricultural worker employment outcomes

Authors’ Response and Revision for Reviewer 2 Report (James Habyarimana)

Thank you for your report. In the following we summarize how we have revised the paper to incorporate your comments and suggestions. We will list the reviewer’s comments in italics and then our response.

1. Minor revisions
The conclusion of this paper seems to indicate that the productivity response of women is not as large as that of men. But it is not clear whether this is because the impact of treatment differs (the authors note that there is not much evidence to support this), and they suspect that this might be the result of a variety of other factors. If possible, it would have been great for the authors to show some biomarker-based evidence of the response to treatment. As it is, these results could be interpreted as they suggest but also that since female compliance to reduced work schedules (and the overall treatment program) is better, their life expectancy (and by extension life time income) would be higher than that of men. At any rate, any information from households, the hospital or workplace that would help understand why we observe the productivity responses we do would make this a much better contribution. For instance it is not inconceivable that adherence outcomes are worse amongst women as a result of discrimination in the implementation of the ’zero’ transport cost policy.

It is true that the impact evaluation methods are somewhat of a black box when it comes to explaining why the differences occur. We unfortunately do not have additional information to explain why we observe the differences. Now that we have learned about such issues, we will direct future research efforts towards explaining and interpreting the differences.

From practical experience (some of our staff live on the plantation, have family members who work on the plantation), the zero transport cost policy is implemented consistently. Tea pluckers are unionized and discrimination in such employment policies would be quickly brought to union representatives.

2. Secondly, towards the end of paper (page 16), the authors refer to the gaps they measure as average treatment effects. While the methodology used here is sound, what they measure is not strictly a treatment effect since the synthetic control group would have to be HIV+ as well and have no treatment. The synthetic control group (which includes asymptomatic HIV+ individuals as well as HIV- individuals) simply helps pin down the time trend in productivity and other company policy such as the remuneration and composition of work offered. The authors should change this language accordingly.
We deleted the sentence on page 16. It was not needed to convey the key point of the paragraph.

3. The authors refer to the task allocation for the synthetic control group that raises some questions about interpretation. Firstly, I think that rather than refer to the other tasks as less strenuous, I think that a better categorization might be along the remuneration dimension. Weeding can be very strenuous. What is puzzling is that given the powerful incentives to pluck tea, men are more likely to be involved in non-plucking activities (bottom of page 9). While this is not a big problem for the main results, it does suggest a strong gendered policy at the company level in the allocation of tasks that could be an interacting confound with disclosure (which is likely lower for males).

We have deleted the portion of the sentence mentioning “less strenuous”. The term ‘non-plucking day’ is our term to denote daily activities where a person is paid a flat daily wage. On the plantation, the workers and managers actually use the term “light duty” for these assignments even though, as you correctly point out, many of activities involve hard work.

There are strong incentives to pluck tea where there is adequate tea leaf in the fields. During certain periods of the year when the leaf quantity is lower, it could actually be better to do day labor (non-plucking assignments).