Title: Factors associated with suboptimal adherence to antiretroviral therapy in Viet Nam: a cross-sectional study using audio computer-assisted self-interview (ACASI)

Authors:

Hoa M Do (dmh@hsph.edu.vn)
Michael P Dunne (m.dunne@gut.edu.au)
Masaya Kato (KatoM@wpro.who.int)
Cuong V Pham (pvc1@hsph.edu.vn)
Kinh V Nguyen (kinhvaac@yahoo.com)

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Author's response to reviews: see over
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Dr Vincent Lo Re  
*BMC Infectious Diseases*  
BioMed Central  
Tel: +44 (0) 20 3192 2013  
e-mail: editorial@biomedcentral.com  
Web: [http://www.biomedcentral.com/](http://www.biomedcentral.com/)

Re: The 2nd revision of manuscript: Factors associated with suboptimal adherence to antiretroviral therapy in Viet Nam: a cross-sectional study using audio computer assisted self-interview (ACASI); MS# 1392241231764323

Dear Dr. Lo Re:

Thank you very much for your positive feedback and helpful suggestions regarding our manuscript. We are pleased to submit this revision in which we have addressed the comments of the reviewer. We describe below the changes made to the manuscript. With respect to your suggestion about the quality of written English, we sought the assistance of a native English-speaking university professor and also an English language editing company (Edanz) to edit our manuscript. We have paid close attention to your suggestions and those of the reviewer, and we believe that the manuscript is substantially stronger as a result of the review process. Should you have any questions or require additional information, please do not hesitate to contact me at the following email address: dmh@hsph.edu.vn. We look forward to receiving your feedback and very much appreciate your time and effort.

Sincerely yours,

Hoa M. Do, MD, PhD.

On behalf of the authors
Thank you very much for your thoughtful and helpful suggestions. We appreciate the time you took to carefully evaluate the manuscript.

**Major Compulsory Revision**

1) **Background**

Following your suggestion, we restructured and revised the background section to make it clearer and more concise. The first paragraph discusses two shortcomings of the studies on ART adherence in Asia: 1) relatively few ART adherence studies have been conducted in Asia, compared with other continents; 2) the face-to-face interview technique can result in social desirability response bias. The second paragraph mentions a third shortcoming of previous reports: the studies in Viet Nam did not quantitatively examine factors associated with ART adherence. The third paragraph provides information on the ACASI technique, which has been used in this study to address the above shortcomings. In our final paragraph we state the objective of our study. Please see pages 3–4.

2) **Data collection**

The ACASI questionnaire was developed specifically for this study, although many sections were adapted from prior research into medication adherence. The process of instrument development, including a qualitative study, questionnaire development, and validation have been previously described [1]. We have included this in the data collection section on page 6.

We added the reasons why we selected the AACTG and VAS tools to measure ART adherence in the last paragraph of page 7.

We highlighted these changes in red.

3) **Measurement of predictor variables**

We added references from our literature review and the qualitative study we conducted, to justify the selected predictor variables in this study. Please see the first paragraph of page 8.

We also revised this section according to your comments, which helped to improve the clarity of this section. Specifically, we deleted unnecessary sentences, provided the definition of the “chance health locus of control”, and added more information on how we measure substance abuse and alcohol use. We highlighted these changes in red. Please see pages 8–9.

4) **Discussion**

As mentioned in the introduction section, previous studies in Viet Nam did not quantitatively examine factors associated with ART adherence. However, many studies on this topic have been conducted in Asia and other regions in the world. Therefore, we revised the sentence as follows: “This study extends previous analyses of the determinants of ART suboptimal adherence that have been conducted in Asia and other regions in the world, and has clear implications for care for PLHIV in low resource environments.”
We followed your suggestions for the discussion section by adding a few clarifying words, deleting unnecessary sentences, and adding two sentences about drug and alcohol abuse services that exist in Viet Nam. We highlighted these changes in red. Please see pages 13-14.

**Minor Revisions**

1) Abstract: We used the term “people living with HIV/AIDS (PLHIV)” consistently throughout the manuscript. Other similar words, such as “HIV infected” or “HIV positive,” have been changed to PLHIV.

2) Background: we revised sentences in the Background section according to your suggestions.

3) Methods: we revised sentences in the Methods section according to your suggestions.

4) Characteristics of study population: we revised sentences in this section according to your suggestions.

**Discretionary Revisions**

We revised the Background and Conclusion sections according to your comments. In the conclusion we added: “Suboptimal adherence was strongly influenced by depression, ongoing substance use, medication side-effects, and poor social connectedness.”

The explanation of how we measured ongoing substance use and depression (see page 8) are included in the revised manuscript.

**Reference:**