Author’s response to reviews

Title: Predictors and correlates of adherence to combination antiretroviral therapy (cART) for chronic HIV infection: a meta-analysis.

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Author’s response to reviews:

Dear Editor,

Thank you for the opportunity to submit a revised version of our manuscript entitled:

“Predictors and correlates of adherence to combination antiretroviral therapy (cART) for chronic HIV infection: a meta-analysis”

to your journal.

On account of the reviewers insightful comments we made several changes to the manuscript. We updated our literature search to June 2014 and included thirty-seven additional papers. We repeated all statistical analyses including these papers and made several changes to our Figures, as suggested by one of the reviewers.

Please find below our replies to the reviewers’ comments and the changes in the manuscript we made.

Reviewer: Edward Mills

1. We have replaced the acronym cART by ART throughout the manuscript.

2. We replaced the single letter ‘d’ by ‘SMD’ throughout the manuscript.

3. We now indicate the statistical significance of the SMD throughout the abstract. We agree that this should preferably be done by giving confidence intervals. However, since providing confidence intervals would exceed the maximum word count for the abstract we decided to give the p-values instead.
4. We changed our statement that “consistent high levels of adherence” are necessary into “sufficiently high levels of adherence” are necessary.

5. We updated our literature search to June 10 2014. Our updated literature search yielded 471 new papers. After screening these papers for eligibility, an additional 37 papers were included in our meta-analyses. We repeated all statistical analyses to include these 37 additional papers and the additional data were included in the text, tables, figures and references.

6. We deleted all mentions of the I2 statistic from the manuscript.

7. We deleted all mentions of publication bias from the methods and results section.

8. Indeed, we did use HDI as independent variable in our meta regression/moderator analyses.

9) We regret the meaning of Q-between was unclear. We have added a description of the meaning and use of Q-between in meta regression/moderator analysis to the method section for clarification (page 8, paragraph 3)

Reviewer: Ira Wilson

We appreciate the reviewers encouraging remarks about our study.

1. Since the reviewer emphasised that this suggestion was only stylistic and did not feel strong about it, we choose to keep the description of main study characteristics unchanged, i.e., a description of the most important study characteristics in the beginning of the results section and details per study of the characteristics in Additional Table 1.

2. We really liked the reviewers’ suggestion to present the summary measures of the predictors/correlates in a single figure in the main text, and to show the forest plots of the individual studies only in an additional online file. The summary measures of the predictors/correlates are now presented in a new figure “Figure 1.1. Predictors/correlates of adherence to ART”. The forest plots of individual studies are presented in “Additional file 1. Forest plots of individual studies examining predictors/correlates”.

3. The reviewer wondered whether there is a way to graphically present the data from the meta regressions because the reviewer found these data quite interesting. We now present the data from the meta regressions graphically in two figures. We have added two new figures to show the results from the meta regression analyses. Figure 1.2 shows the countries Human Development Index as moderator of the predictor-adherence relationship. Figures 1.3 shows the adherence assessment method and study design as moderator of the predictor-adherence relationship.
We hope that our replies to the reviewer comments’ and the accompanying revised manuscript have made the paper suitable for publication in BMC Medicine.

We feel privileged for the opportunity to submit a revised version of our paper to your journal, and look forward to hearing from you again.

Yours sincerely,

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