Reviewer’s report

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

Version: 1 Date: 20 May 2014

Reviewer: Edward Mills

Reviewer's report:

This is a large and comprehensive meta-analysis looking at predictors of adherence to ART. In general, it is well done and well reported. Below are some issues for the authors to consider.

Major compulsory issues

1) Don’t use the acronym cART. No one really uses that anymore and ART alone is correct as that is what patients call it.

2) Rather than the single letter “d” to define mean difference, it is more customary to write SMD. I suggest making that change throughout.

3) Throughout the abstract, it would be useful to know whether the SMD is significant, preferably using confidence intervals.

4) Your statement in the introduction that consistent high levels of adherence are necessary is actually not correct. As ART got better, it is more forgiving and many patients have positive clinical outcomes with only moderate adherence and even taking breaks.

5) The search is now two years old and arguably should be updated.

6) The I2 value has no meaning when pooling cohort studies as it invariably gives large effects, even when there is no apparent heterogeneity. I suggest deleting.

7) Similarly, publication bias assessment makes no sense when you know that these are just a sample of clinic data from all possible ART clinics. So you invariably have publication bias.

8) You should have used a multivariate regression and have HDI as an independent variable.

9) I don’t understand what is Qbetween. Do you mean the Q value? If so, its Cochrane’s Q and isn’t really helpful here.

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests