Reviewer’s report

Title: Development of a Nursing Intervention to Facilitate Optimal Antiretroviral Treatment Taking among People living with HIV

Version: 1 Date: 26 February 2009

Reviewer: Mary Wells

Reviewer’s report:

This is a well written and very interesting paper on the development of a nursing intervention to promote optimal antiretroviral taking in PLHIV, illustrating the application of intervention mapping. I have a few minor comments.

Minor essential revisions
1. Figure 1 does not appear under the title. I assume it is the figure on p24. It might be helpful to add further labels e.g. Predictors to relevant boxes, and to delineate between the empirical and theoretical components, to aid clarity.
2. Some minor revisions to Table 1 would help to reduce possible confusion. Table 1 presents and example of 2 performance objectives rather than a complete matrix of intervention objectives – this should be made clear. The text on p5 discusses “component parts of behavioural interventions” “change objectives” and “performance objectives”. However Table 1 uses the terminology of “Predictors” and does not specify that the objectives are “change objectives”. Sentence 2 of the text under Step 2 on p5 talks about “so called performance objectives” and it is not clear whether this refers to functional capabilities or change objectives.
3. There are a couple of typos e.g. trails on p16. I have some queries over some of the references e.g. should ref at top of p16 be 14 not 15?; should ref for mnemonic DECIDE on p16 really be Bandura?
4. The strengths and limitations of the IM approach should be discussed at least briefly. This could relate to my first point under discretionary revisions.

Discretionary revisions
1. Can the authors comment on how IM relates to/differs from other models/frameworks e.g. logic modelling, REAIM (Glasgow et al), MRC framework for the evaluation of complex interventions (which is in common use in UK)? For an international audience this would be useful, and would help those interested in intervention development (but not the specific area of antiretroviral medication) to engage more effectively with the paper.
2. Considerable detail is given for the theoretical and empirical basis of the content of the intervention. It would be helpful if the authors could comment on the characteristics of the nurse, training and supervision required and on the choice of intervention structure e.g. why 4 sessions?
3. Some further detail about the target population and risks re engagement with the intervention itself. For instance, what are the sociodemographics of the population (other than that they are mostly gay men)?

4. Could the authors comment on the sustainability of the intervention beyond the trial?

5. Could the authors refer to the literature on concordance in their background section, illustrating how the evidence on antiretroviral treatment taking fits with evidence and theories related to concordance?

**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