Reviewer’s report

**Title:** Anxiety and depression amongst patients enrolled in a public sector antiretroviral treatment programme in South Africa: a cross sectional study

**Version:** 2 **Date:** 9 July 2011

**Reviewer:** Rob van Hest

**Reviewer’s report:**

In the manuscript “Anxiety and depression amongst patients enrolled in a public sector antiretroviral treatment programme in South Africa: a cross sectional study” the authors describe the results of interviews among 716 HIV seropositive patients initiating ART from 12 public health care facilities in the Free State, RSA. Anxiety and depression can contribute to the burden of public mental health problems.

**Major Compulsory Revisions:**

Although this journal is on-line, this should not prevent authors from keeping a concise style of writing. There is room for improvement in this manuscript, e.g. on page 5 the authors report on already identified predicting factors for anxiety and depression among HIV+ populations, with references. The authors then need another two pages (in an Introduction) to elaborate on the previous studies, although they are referenced. When they rewrite this start of the paragraph as:

“Researchers have identified a broad spectrum of factors predicting anxiety and depression among HIV+ populations. The predictors of depression identified in the literature include demographic (age, gender), socio-economic (education, income, poverty), behavioural (alcohol use, sexual activity), psychosocial (stigma, positive coping, social support, family support and disclosure) and health variables (pain, health, time on treatment) [7, 9, 12-24].”

Then all the text below until the middle of page 7 ending with “……excessive depressive symptoms [17]” can be deleted without losing much essential information. Some of these studies are coming back in the text of the Discussion anyway. The first three sentences of the next paragraph on page 7 could be deleted as well as they are largely repetition of what has been said earlier.

The authors need almost three pages to describe the variables. Would the readability manuscript not benefit when this was done in the format of a Table or an Appendix?

In Table 1 the results are presented of a univariate logistic regression, with three levels of P-values. This is rather conventional as a preparation for the next step,
namely perform a multivariate logistic regression analysis on these variables. The authors apparently have not considered or performed a multivariate analysis, at least they do not present the results and I do not know why. I wonder for example why age is not given in age groups?

Many of the OR’s are borderline significant in the univariate analysis and only a few (avoidant coping and very disruptive side effects for anxiety and the stigma scale for anxiety and depression) stay a bit or clearly away from an OR of 1.00 at a reasonable P-value. Yet for 8 variables the authors present the outcomes (e.g. in the Abstract) as “significantly correlated”. This may be technically correct but could have been placed in perspective. On page 14 stigma is presented as “highly” correlated with symptoms of anxiety depression but OR =1.12 (CI 1.06 -1.19) and OR = 1.14 (CI 1.07 – 1.21) make me feel uncomfortable with this conclusion.

In the Discussion the authors describe in the first 3½ pages that apart from two (one marginal) effects on anxiety and one effect (disclosure) on depression, all other findings have been described before. There seems to be little “what’s new in this study”.

The second paragraph of page 18 should be the first paragraph of the Discussion, namely a brief presentation of the main findings of a study and the strengths and limitations of the study (although I am not sure whether this study identified “the most important predictors” as I understand that other studies have identified other predictors, e.g. age, gender or education).

When the significance of some of the predictors identified in an univariate analysis are marginal, so can be the effect of some of the suggested interventions. Also I miss details of how the authors would like to realise their suggested interventions: is there sufficient capacity in the Free State Public Health System to expand drug readiness training, or when disruptive side effects occur, the availability of (more expensive alternative ART? Is there sufficient capacity in the Public Mental Health System to diagnose (and treat) depression and anxiety in HIV + patients initiating ART?

In this format I find the manuscript too premature for publication.

**Level of interest:** An article of limited interest

**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'