Reviewer's report

Title: Training in Dual Diagnosis Interventions (The COMO Study): A Randomised Controlled Trial

Version: 3 Date: 10 August 2007

Reviewer: Carl J Lombard

Reviewer's report:

General
For someone who reads this manuscript the basic design of the study will still be confusing. The setting of the evaluation of the intervention effect at the case managers level should be well described.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

From the current description of the randomisation and evaluation of the case managers this is not a cluster randomised trial. For the outcomes measured at the case managers level it is a individual level RCT. For this 'RCT' individuals were randomised to the two arms of the study. This was done within centres.

The confusion may be due to the broader design of the study. The service user outcomes are reported in a separate paper (ref 17) and for these outcomes the cluster design is appropriate. The authors should therefore describe the evaluation of the case managers outcomes within this broader setting. This description also holds for the sample calculations. If the primary outcome of the broader study was at the service user level this calculation will drive the number of service providers recruited.

The current description of the sample size implications for the case managers provide the reader with information on the adequacy of the broader design to also cater for the outcomes evaluated at the case manager level.

There are some inconsistences in the reporting of some elements of the study.
1. The number of community health teams recruited.
   In the abstract it is reported as 13/14 whereas in the text and consort statement it is 12/14.

2. Case managers lost to follow-up
   In the text it is stated that there was a higher rate of lost to follow-up in the intervention group compared to control. In the consort diagram the opposite is depicted.

3. In the abstract it is reported that adequacy of knowledge and skills in working with alcohol and drug users were significant. From table 2 this is only true of the
alcohol users.

4. In the abstract it is reported that the self-esteem in working with drinkers and drug users were significant. From table 2 this is only true for drinkers. For drug users the reported 95% confidence interval is -.603 to 4.465. This interval spans 0 the null effect reference value. The same intervention effect is reported for two different users whereas they are seperately reported in Table 2.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The number of decimal places provide for the reported treatment effects of scores from questionnaires should be limited. Reporting it to 3 decimals is not relevant for these ordinal scales.

It is reported that 20% of mental case loads will be people comorbid conditions. Twenty percent of the average case load of 20 people is 4 and not 5 as reported in the methods (sample size).

The sample size of each arm should be given in table 1

The wording of the treatments in the consort statement should be consistent.

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Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

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'