Reviewer's report

Title: Community-based mental health treatments for survivors of torture and militant attacks in Southern Iraq: a randomized control trial

Version: 3  Date: 21 July 2015

Reviewer: Laura Goodwin

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This is an important intervention study with the potential for high impact. There would be great value in an effective intervention which can be delivered by community health workers to individuals who have been exposed to trauma.

However, there are a number of issues in regard to the design of the trial which I think need to be further explained before this study is published.

Major compulsory revisions:

The trial is described as a 3-arm trial yet it appears to comprise two separate parallel arm trials. Although it is discussed that the aim was to combine the two control groups, it is not clear why the randomisation didn’t take place overall, assigning each individual to either of the interventions or to the control group. The randomisation also seems to have taken place at CMHW level and overall randomisation may have resulted in more balanced groups at baseline in regard to the demographics. Although tables 1a and 1b indicate that the control and intervention arms are similar for the mental health outcomes, there are some demographic differences. But these may be unavoidable due to the low numbers in the trial.

There are issues with the sample size calculation as this is for a 3-arm trial and it is also not accounting for clustering my CMHW. Additionally it is not clear why a medium effect size was chosen for this calculation.

The CETA intervention is described as a very flexible approach, but it sounds like the delivery could differ quite significantly by CMHW and it may therefore be difficult to ensure intervention fidelity, and this issue is raised in the results. Furthermore, it is not clear if this intervention has been piloted and the description of the key elements of this intervention are limited.

Although two different interventions are studied, they are not compared which may have been possible if the randomisation had been conducted as a 3-arm trial. This information would have been valuable in comparing the effectiveness of the CETA to CPT which is a more established intervention.

There are some issues with the statistical analyses which have been used and it is likely that there may not be the statistical power to test the multilevel models which were conducted, given that the power calculation did not account for
clustering by CMHW. The Hausman test was used to determine if random effects models were appropriate, but given this was of borderline significance, there is uncertainty as to whether these are the most appropriate models.

Finally, I have concerns regarding the implications and interpretation of the findings given that the control group for CETSA was selected as a post-hoc decision. The effect sizes found may have been much smaller if the control groups had been combined as originally planned and I think that a better case could be made for the value of this intervention if the comparison was conducted as planned in the protocol.

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

Quality of written English: Acceptable

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

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