Reviewer's report

Title: Effectiveness of Primary Care Triple P on Child Psychosocial Problems in Preventive Child Healthcare: a Randomized Controlled Trial

Version: 3 Date: 3 July 2013

Reviewer: Sarah Stewart-Brown

Reviewer's report:

Thank you for asking me to review this paper which reports a trial of one aspect of a well known parenting programme.

The need for this trial is well justified

Methods

The research methods can be criticised on the basis that the approach to calculation of the sample size may have resulted in underpowering the study. The calculation is based on an effect size of 0.5. This is within the average effect size for all trials of Triple P. However many of the latter are with clinically indicated participants where the possibility for improvement is much greater.

Meta-analysis of trials of targeted and indicated parenting programmes together give an average effect size of 0.4 (see for example Kendrick D, Barlow J, Hampshire A, Stewart-Brown S, Polnay L. Parenting interventions and the prevention of unintentional injuries in childhood: systematic review and meta-analysis. Child: care health and development. 2008:34(5);682 - 695). Trials of programme in subclinical populations like this where outcomes are measured with clinical indicators are likely to show smaller effect sizes still, but these may still be important. In the event the authors recruited just over half of the intended sample size.

It is important that small RCTs are reported so their results can be included in meta-analyses but it is also important that the fact they are underpowered is acknowledged.

It is not entirely clear what the eligible population constituted. It is said that children with conduct disorders were excluded but those with a clinical and subclinical level of problems were eligible. Does this mean only those children who had seen a psychiatrist and had a diagnosis of conduct disorder were excluded and those who had similar levels of problems but had not been diagnosed were included.

Results

I am not clear about the results reported on page 11. It would seem there was one positive finding (SDQ Conduct), but this disappeared in the intentions to treat
analysis. If this is the case on what basis were the analyses reported previously undertaken. Whilst is it only one of many outcomes and therefore should not be over interpreted the SDQ conduct score finding is important since conduct or behaviour problems is the primary goal of Triple P

Discussion

Only a small proportion of eligible parents consented to take part. It is important that this is discussed and addressed in the discussion. It implies potential for bias in external validity Issues relating to recruitment by screening in contrast to recruitment by open invitation need addressing. Open invitation is much more likely to recruit parents who are ready to change and this is important in behaviour change interventions. This trial (were it adequate powered could just be showing that screening is an inappropriate method of recruiting to the Triple P programme.

The power calculation is discussed and said to be based on a clinically relevant difference of 3 points on the SDQ. A clinically important difference is only relevant in clinical populations. In subclinical populations such as this particularly with highly skewed measures such as the SDQ and Eyberg, smaller differences are to be expected and given the larger size of the population smaller differences may be very important in terms of population attributable risk

The conclusions should mention the fact that the trial was underpowered and that the differences found could be important viewed from a public health perspective

The abstract needs amending accordingly.

Major compulsory revisions
1. Address issues related to sample size described above including reporting that this trial was underpowered
2. Address relevance of ‘clinically important differences’ in context of prevention
3. Discuss recruitment method and influence on outcomes

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

Professor Stewart-Brown undertakes primary and secondary research on parenting programmes. She is a trustee of the UK Charity Family Lives