A review of the effectiveness of group cognitively enhanced behavioral based parent programs designed for reducing disruptive behavior in children

Gavita O, Joyce M

CRD summary
This review concluded that cognitively enhanced behavioural programmes can improve child disruptive behaviour and parental distress, but that such programmes only add a small effect compared with standard parent programmes. These conclusions should be interpreted with caution due to potential limitations in the analysis and a possibility of publication bias.

Authors' objectives
To determine the effectiveness of group-based cognitively enhanced behavioural programmes for reducing children's disruptive behaviour and parent distress.

Searching
MEDLINE, Trip, The Cochrane Library, ERIC and PsycINFO were searched without language restrictions from 1970 to July 2008. Search terms were reported. References of retrieved studies and relevant review articles were screened.

Study selection
Randomised controlled trials (RCTs) and quasi-RCTs that compared enhanced parental training for prevention or treatment of disruptive behaviour in children to standard treatment, no treatment, waiting list or placebo were eligible for inclusion. Enhanced parental training was considered to involve parent training for reducing externalising behaviour in children, delivered in a group-based format, enhanced with a cognitive component that addressed parental distress also delivered in a group-based format. Studies were required to report at least one standardised instrument for measuring child behaviour or parental distress.

Four studies used Enhanced Behavioural Family Intervention, level 5 Enhanced triple P. One study assessed Incredible Years Series BASC program supplemented by the ADVANCE parenting curricula. Comparator interventions consisted of waiting-list controls or standard behavioural-based parent programme. Parents participated in multiple sessions for both the parenting sessions and enhanced sessions. Parents of children aged two to eight years were included. Outcome assessment was based on self-reported measures.

The authors did not state how many reviewers assessed studies for inclusion.

Assessment of study quality
Studies were assessed for methodological quality according to criteria of sample size, randomisation, allocation concealment, drop-outs, blinding, follow-up, reporting of clinically important outcomes and distribution of confounders.

The authors did not state how many reviewers assessed study quality.

Data extraction
Mean differences in post-intervention scores between intervention and control groups were extracted and divided by the pooled standard deviation to estimate effect sizes (ES).

The authors did not state how many reviewers extracted the data.

Methods of synthesis
A fixed-effect model was used to estimate summary effect sizes together with 95% confidence intervals (CIs). Data
were pooled for all outcomes combined and separately for each clinical outcome category and for waiting list or standard treatment comparators.

Results of the review

Five RCTs were included (1,008 parents). All studies fulfilled criteria for randomisation, reporting of clinically important outcomes, reporting of withdrawals and distribution of confounders. Blinding was considered inappropriate as assessment was based on self-report measures. None of the studies reported details on the method of allocation concealment. Drop-out rates ranged from 8% to 40%. Follow-up ranged from three months to three years.

Overall, there was a significant medium effect of the enhanced condition compared to control of waiting list or standard parent programme (ES 0.61, 95% CI 0.5 to 0.7; 238 parents, number of studies unclear).

Enhanced parenting intervention compared to wait-list control (two studies): Enhanced parenting programmes resulted in improved child disruptive behaviour (ES 0.75, 95% CI 0.6 to 0.8; two RCTs), parenting practices (ES 0.73, 95% CI 0.6 to 0.8; 238 parents, number of studies unclear), and parental self competency (ES 0.49, 95% CI 0.4 to 0.5).

Enhanced parenting intervention compared to standard parenting intervention (five studies): Immediately post-intervention, enhanced parenting programmes resulted in improvements in all variables combined (ES 0.25, 95% CI 0.2 to 0.3; 467 parents, number of studies unclear), child disruptive behaviour (ES 0.18, 95% CI 0.1 to 0.2; number of studies unclear), parenting practices (ES 0.25, 95% CI 0.1 to 0.3; 467 parents, number of studies unclear), parental distress (ES 0.32, 95% CI 0.2 to 0.3; 457 parents, number of studies unclear) and parent satisfaction with the programmes (ES 0.60, 95% CI 0.4 to 0.7; 318 parents). At follow-up there was no significant difference between groups for child disruptive behaviour, but differences were maintained for all variables of interest combined (ES 0.25, 95% CI 0.2 to 0.3; number of studies unclear), parenting practices (0.36, 95% CI 0.2 to 0.5; 315 parents, number of studies unclear) and parental distress (ES 0.36, 95% CI 0.2 to 0.4; 315 parents, number of studies unclear).

Authors’ conclusions

Cognitively enhanced behavioural programmes can be effective in improving both child disruptive behaviour and parental distress. Improvements were maintained even at three years follow-up. However, cognitively enhanced programmes added only a small effect when compared with standard parent programmes.

CRD commentary

The review addressed a clear question and inclusion criteria were defined. A relevant range of databases was searched. No specific attempts were made to locate unpublished studies and so there was a possibility of publication bias. No details of the review process were reported and so it was impossible to determine whether appropriate steps were taken to minimise bias and errors. Study quality was formally assessed using relevant criteria that showed the studies to be of reasonable quality. Pooling of data appeared appropriate; however, statistical heterogeneity was not assessed and so it was not possible to determine whether there were differences between studies and whether it was appropriate to use a fixed-effect model. The reporting of results was confusing. It was unclear how many studies contributed to each meta-analysis or why most comparisons appeared to include only a subset of the total included parents.

The authors conclusions should be interpreted with caution due to potential limitations in the analysis and a possibility of publication bias.

Implications of the review for practice and research

Practice: The authors stated that enhanced parenting interventions had the potential to impact on patient health and that the cost-benefit ration might be acceptable if the patients who did not benefit from standard parental interventions were targeted.

Research: The authors stated that future research should focus on evidence-based cognitive/stress reduction components as beliefs were major components of distress.
Funding
Not stated.

Bibliographic details

Original Paper URL

Indexing Status
Subject indexing assigned by CRD

MeSH
Child Behavior Disorders; Group Processes; Humans; Parenting; Teaching

AccessionNumber
12009103479

Date bibliographic record published
03/06/2009

Date abstract record published
09/02/2011

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.