Enhancing adoptive parenting: a cost-effectiveness analysis
Sharac J, McCrone P, Rushton A, Monck E

Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

CRD summary
This study examined the cost-effectiveness of home-based parenting programmes designed to reduce behavioural difficulties in children aged between three and eight years, who were adopted from care. The authors concluded that adoption support programmes did not improve child mental health, but might be cost-effective in improving parental satisfaction, compared with usual care. The study had some methodological limitations, mainly due to the small sample, and these might affect the validity of the authors’ conclusions.

Type of economic evaluation
Cost-effectiveness analysis

Study objective
This study examined the cost-effectiveness of home-based parenting programmes designed to reduce behavioural difficulties in children aged between three and eight years, who were adopted from care.

Interventions
Two parenting programmes, with training manuals, were considered. Both were delivered at home by trained family social workers in 10 consecutive, weekly one-hour sessions. The first programme used a cognitive behavioural approach to reduce unacceptable and increase acceptable behaviour by praise and rewards, by ignoring, by setting firm limits, and by using logical consequences and problem solving. The second programme used an educational approach to improve the parents’ understanding of the meaning of their child's behaviour and how the child’s past experience and present behaviour might be connected.

Each family received one of these two programmes and this was compared with the usual care, which was no intervention.

Location/setting
UK/community (home).

Methods
Analytical approach:
The analysis was based on a single study with a six-month time horizon. The authors did not explicitly state the perspective adopted.

Effectiveness data:
The clinical data came from a published randomised controlled trial (RCT) of 37 families, with 19 receiving either intervention (10 cognitive behavioural and nine educational) and 18 receiving the usual care. In the intervention group, 53% of children were female, and in the control group, 55% were female. Their mean age was 68 months for the intervention and 65 months for usual care. No child had severe physical or learning difficulties at the time of inclusion in the trial. The primary endpoint was the Strengths and Difficulties Questionnaire (SDQ) score, which assessed changes in the child's mental health. Another key endpoint was the Parental Feedback Questionnaire score. Outcomes were assessed at baseline, after two and 12 weeks, and after six months.

Monetary benefit and utility valuations:
Not considered.
Measure of benefit:
The two outcomes were the benefit measures: parent satisfaction, and the child's mental health (SDQ score). These data were directly from the RCT.

Cost data:
The economic analysis included the costs of the intervention, including salary, overheads, and training. Contacts with other health care professionals were considered, as well as possible hospitalisations. The resource quantities were estimated from the RCT data. The unit costs were from official UK sources. Baseline differences were taken into account using regression models. All costs were in UK pounds sterling (£) at 2006 to 2007 prices.

Analysis of uncertainty:
The results were presented as means, with their standard deviations.

Results
The costs were higher for the interventions than for usual care. Adjusted for baseline factors, the cost difference between groups was £1,528 (bootstrapped 95% CI 67 to 2,782) at 12 weeks, and £222 (bootstrapped 95% CI -2.384 to 1.182) at six months. Over the six months, the mean difference was £1,652 (bootstrapped 95% CI -1,709 to 4,268). This cost difference was statistically significant only at 12 weeks.

The total difficulties score on the SDQ for the intervention group was worse than usual care by 2.13 points at 12 weeks and 0.79 points at six months. Usual care was dominant as it was more effective and less expensive than the intervention; the problem scores remained high in both groups.

Satisfaction with parenting was higher for the intervention group at 12 weeks by 2.09 points and at six months by 4.90 points. The incremental cost per point improvement in satisfaction with parenting, with the intervention, compared with usual care, was £731 at 12 weeks and £337 after six months.

Authors’ conclusions
The authors concluded that the adoption support programmes did not improve child mental health, but might be cost-effective in improving parental satisfaction, compared with usual care. Larger studies with longer follow-up were needed.

CRD commentary
Interventions:
The selection of the comparators was appropriate as the proposed interventions were compared against the normal care in the authors’ setting. A description of the two programmes was given, but usual care was not clearly defined.

Effectiveness/benefits:
The authors did not provide details of the methods and results of the RCT, as these were published elsewhere (Rushton, et al. 2010, see ‘Other Publications of Related Interest’ below for bibliographic details). In general, RCTs are robust sources of evidence due to their methods, but the authors acknowledged that their trial had few participants as recruitment was difficult. This reduces the internal validity of the data and the generalisability of the findings, as the sample might not be representative of other patient populations. The benefit measures were intervention specific and do not permit comparisons to be made with the benefits of other programmes.

Costs:
The perspective was not explicitly stated, but the cost items reflected that of the health care payer. The data were directly from the RCT, which should ensure detailed collection, but they were reported by the families and social workers. Extensive details of the unit costs and resource use were given, enhancing the transparency of the analysis. Standard UK sources were used for the unit costs. In general, the economic part of the analysis was conducted satisfactorily.

Analysis and results:
The cost results were extensively presented and discussed, while the clinical findings were selectively reported, as they
were published in another paper. The uncertainty was not considered in a sensitivity analysis. Large confidence intervals were found for the cost results, probably due to the small sample. The authors stated that another limitation of their analysis was the self-reporting of resource use, which could have introduced recall bias. A longer follow-up would have been useful. The analysis was specific to the authors setting and the generalisability of the results was not discussed.

Concluding remarks:
The study had some methodological limitations, mainly due to the small sample, and these might affect the validity of the authors’ conclusions.

Funding
Funded by the UK Department of Health (Department for Children, Schools and Families), and the Nuffield Foundation.

Bibliographic details

DOI
10.1111/j.1475-3588.2010.00587.x

Original Paper URL

Other publications of related interest

Indexing Status
Subject indexing assigned by CRD

MeSH
Adoption; Child; Child Behavior Disorders; Child, Preschool; Cost-Benefit Analysis; Humans; Parenting

AccessionNumber
22011000837

Date bibliographic record published
13/07/2011

Date abstract record published
24/08/2011