



<b>Title</b>	<b>The Effectiveness and Cost Effectiveness of Parent Training/Education Programs for the Treatment of Conduct Disorder, Including Oppositional Defiant Disorder, in Children</b>
<b>Agency</b>	NCCHTA, National Coordinating Centre for Health Technology Assessment Mailpoint 728, Boldrewood, University of Southampton, Southampton SO16 7PX, United Kingdom; Tel: +44 2380 595586, Fax: +44 2380 595639
<b>Reference</b>	Health Technol Assess 2005;9(50). Dec 2005. <a href="http://www.hta.ac.uk/execsumm/summ950.htm">www.hta.ac.uk/execsumm/summ950.htm</a>

## Aim

To assess the clinical and cost effectiveness of parent training programs in treating children with conduct disorder (CD) up to the age of 18 years.

## Conclusions and results

Many of the 37 randomized controlled trials that met the inclusion and exclusion criteria lacked methodological detail. Studies were clinically heterogeneous as regards population, type of parent training/education program, and content, setting, delivery, length, and child behavior outcomes. Vote counting and meta-analysis revealed a consistent trend across all studies toward short-term effectiveness (up to 4 months) of parent training/education programs (compared with control) as measured by a change in child behavior. Pooled estimates showed a statistically significant improvement on the Eyberg Child Behavior Inventory frequency and intensity scales, the Dyadic Parent–Child Interaction Coding System and the Child Behavior Checklist. No studies reported a statistically significant result favoring control over parent training/education programs. There were few statistically significant differences between different parent training/education programs, although there was a trend toward more intensive interventions (eg, longer contact hours, additional child involvement) being more effective. The cost of treating CD is high, with costs incurred by many agencies. Criminality incurs the greatest cost, followed by education, foster and residential care, and state benefits. Only a small proportion of these costs fall on health services. Using a ‘bottom-up’ costing approach, the costs per family of providing parent training/education programs range from 629 to 3839 British pounds (GBP), depending on the type and style of delivery. Using the conservative assumption that there are no cost savings from treatment, a total lifetime gain of 0.1 in quality of life would give a cost per quality-adjusted life-year of between GBP 38 393 and GBP 6288 depending on program delivery and setting.

## Recommendations

Parent training/education programs appear to be an effective and potentially cost-effective therapy for children with CD. However, the relative effectiveness and cost effectiveness of different models (such as therapy intensity and setting) require further investigation.

## Methods

The effectiveness review identified and evaluated relevant studies. A quantitative synthesis of behavioral outcomes across trials was undertaken using 2 approaches: vote counting and meta-analysis. The economic analysis consisted of reviewing previous economic/cost evaluations of parent training/education programs and the economic information in sponsors’ submissions; exploring in detail the costs of parent training/education programs; and a de novo modeling assessment of the cost effectiveness of parent training/education programs. The potential budget impact to the health service of implementing such programs was also considered.

## Further research/reviews required

Further research is required on the impact of parent training/education programs on the quality of life for children with CD and their parents/carers, on longer term child outcomes, and on the effectiveness and cost effectiveness of different models of parent training/education programs.