Parent training improved maternal wellbeing and reduced attention deficit hyperactivity disorder symptoms in children

Sonuga-Barke E.J., Daley D., Thompson M, et al. Parent-based therapies for preschool attention-deficit/hyperactivity disorder: a randomized, controlled trial with a community sample. J Am Acad Child Adolesc Psychiatry 2001 Apr;40:402-8.

QUESTION: In 3 year old children with attention deficit hyperactivity disorder (ADHD), how effective are parent based therapies?

Design

Randomised {allocation concealed}*, blinded (outcome assessors), controlled trial with 23 weeks of follow up.

Setting

Community based study in the UK.

Patients

78 three year old children (62% boys) who met the validated cut off for ADHD on the Parental Account of Childhood Symptoms (PACS) ADHD/Hyperkinesis scale and whose parents reported that the child's condition warranted treatment. Exclusion criteria were serious mental illness or learning disability in a parent or a previous diagnosis of a mental health condition. 7 children withdrew but were included in the analysis.

Intervention

30 children were assigned to parent training (PT), 28 to parent counselling and support (PCS), and 20 to a waiting list control group. The PT group received coaching in child management techniques. The PCS group received non-directive support and counselling. Both treatments consisted of a structured 8 week programme for mothers, involving 8 one hour weekly visits to the child's home by a specially trained therapist.

Main outcome measures

Child ADHD symptoms, mothers' wellbeing, and recovery defined as a PACS score < 15.65.

Main results

Analysis was by intention to treat. ADHD symptoms were reduced (p < 0.0001) and mothers' sense of wellbeing was increased (p<0.005) by PT relative to the PCS and control groups. More children in the PT group were considered recovered by the end of the trial than those in either the PCS or control groups (table). The recovery rate for those in the PCS group did not differ from that of the control group (table).

Conclusion

In 3 year old children with attention deficit hyperactivity disorder, parent training improved symptoms and improved maternal wellbeing.

*Information provided by the author.

COMMENTARY

This study by Sonuga-Barke et al is an important addition to the literature on the treatment of preschool age children with ADHD symptoms. Recent studies have emphasised the importance of medication in the treatment of ADHD,12 but the first line medication, methylphenidate, is not licensed for preschool age children. As a result, most psychiatrists in the UK will not diagnose the condition in children <5 years of age. The Multimodal Treatment Study of Children with ADHD reported that medication management alone or in combination with behavioural therapy was the most effective treatment for school age children, with no difference between medication management and combination therapy in direct comparison.1 In contrast, the study by Sonuga-Barke et al concentrated on children who were not medicated, and thus provides options for alternative treatment. Importantly, this study measured outcomes in both children and mothers, as parenting a child with these symptoms is an exhausting experience both physically and emotionally.

Strengths of the study include its randomised design and the masking to treatment allocation of the psychologist who assessed outcomes. The clinical importance of this research lies in the difference in effect between the PT programme approach, which is described in behavioural and educational terms, and a non-directive, supportive alternative. The results indicate a clear difference, favouring PT over PCS, and suggest that such methods of early intervention can be effective. It is not yet known whether these effects continue over the long term. The authors note that the effects of PT were maintained at 15 weeks follow up and it would be interesting to know if these effects endure beyond that point. Furthermore, this study did not seek to answer the question of whether PT reduces the need for long term medication. More research is needed to explore this exciting possibility.

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- The MTA Cooperative Group. A 14-month randomized clinical trial of treatment strategies for attention-deficit/ hyperactivity disorder. Arch Gen Psychiatry 1999;56:1073-86.
- National Institute for Clinical Excellence (NICE). Guidance on the use of methylphenidate (Ritalin, Equasym) for attention deficit/ hyperactivity disorder (ADHD) in childhood. London: NICE,

Percentage of children with attention deficit hyperactivity disorder classified as "recovered" at the end of the trial

Comparison	Event rates	RBI (95% CI)	NNT (CI)	
PT v control	53% v 25%	113% (1 to 403)	4 (2 to 785)	
PCS v control	39% v 25%	57% (-31 to 287)	Not significant	

†PT=parent training; PCS=parent counselling and support. Other abbreviations defined in glossary; RBI, NNT, CI calculated from data in article.

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