No difference in effectiveness existed between community and hospital based interventions for children with behavioural disorders

Harrington R, Peters S, Green I, et al. Randomised comparison of the effectiveness and costs of community and hospital based mental health services for children with behavioural disorders. BMJ 2000 Oct 28;321:1047-50.

QUESTION: In children with behavioural disorders, is a community based mental health intervention more effective and less costly than a hospital based intervention?

Source of funding: NHS Executive's Motherhood and Child Health initiative.

For correspondence: Professor R Harrington, University Department of Child and Adolescent Psychiatry, Royal Manchester Children's Hospital, Pendlebury, Manchester M27 4HA, UK. Fax +44 (0)161 728 2294.

Design

Randomised (allocation concealed*), blinded (outcome assessors)*, controlled trial with 1 year of follow up.

2 health districts in the north of England, UK.

Patients

141 parents of children 3-10 years of age (median age 7 y, 79% boys) with behavioural disorders but normal intelligence. The children were referred to child and adolescent mental health services. 82% were followed up for 1 year.

Intervention

72 parent and children pairs were allocated to community treatment (a child and adolescent mental health service in a National Health Service facility) and 69 were allocated to hospital treatment. The 2 health districts provided the same intervention either in the community or in the hospital. Similar parental education interventions were provided in all settings.

Main outcome measures

Parents' and teachers' reports of the child's behaviour, parental depression, parental criticism of the child, effect of the child's behaviour on the family, and costs assessed at 3 months and at 1 year.

Main results

Analysis was by intention to treat. No differences existed between the groups at 3 months or at 1 year (table). The study had > 90% power of detecting an effect size of 0.8 for the mean difference in parental report of child behaviour between the treatment groups. Cost measures did not differ between the groups.

Conclusion

In children with behavioural disorders, no difference in effectiveness existed between similar parental educational interventions offered in the community or in the hospital.

*See glossary.

Difference in mean scores on various outcomes comparing a community based intervention with a hospital based intervention for parents of children with behavioural disorders

Outcomes at 1 year	Difference (95% CI)	p Value
Intensity of child's behavioural problems—parental report	-9.8 (-20.2 to 0.6)	0.06
Intensity of child's behavioural problems—teacher's report	1.8 (-12.9 to 16.6)	0.81
Parental depression	-1.7 (-4.7 to 1.3)	0.28
Effect of child's behaviour on family	-0.5 (-2.2 to 1.2)	0.57
Parental criticism of child	-0.2 (-1.1 to 0.7)	0.64
Parental report of parenting problems	0.1 (-0.2 to 0.4)	0.38

COMMENTARY

Parenting training is the treatment of choice for children with behavioural problems in middle childhood. Several protocols have been shown to have benefit in North American efficacy studies, and a subset meet the exacting criteria for empirically supported treatment.1 Effectiveness studies are fewer but some community based investigations have produced promising results and can make prima facie claims about greater potential generalisability and less stigmatisation and therefore greater treatment acceptability.

The study by Harrington et al is a carefully designed study that shows little difference between community and hospital based implementations of this kind of programme. Previous reports which found a benefit for community settings rather than hospital settings were methodologically weaker with high levels of attrition.2 It should also be noted, however, that community implementation in the present context is to be interpreted as a healthcare (National Health Service) facility away from the hospital but not as a community facility (eg, library, school, community centre). The size of improvement observed was relatively small, which is a common observation in studies of ordinary child psychiatric clinical practice.3 Nevertheless, given the apparently small treatment effects the absence of a difference between community and hospital settings is not surprising. This is an extremely important study that shows that results from North America should only be used in the design of British mental healthcare delivery for children in a thoughtful and empirically based manner.

> Peter Fonagy, BSc, PhD, DipPsych, FBA University College London London, UK

- Fonagy P, Target M, Cottrell D, et al. A review of outcomes of all treatments of psychiatric disor-
- der in childhood. London: National Health Service Executive, 2000 (MCH 17–33).

 Cunningham CE, Bremner R, Boyle M. Large group community-based parenting programs for families of preschoolers at risk for disruptive behaviour disorders: utilization, cost effectiveness, and outcome. J Child Psychol Psychiatry 1995;36:1141–59.

 Weiss B, Catron T, Harris V, et al. The effectiveness of traditional child psychotherapy. J
- Consult Clin Psychol 1999;67:82-94.