

# Review: cognitive behaviour therapy is beneficial in children with anxiety disorders

Cartwright-Hatton S, Roberts C, Chitsabesan P, *et al.* Systematic review of the efficacy of cognitive behaviour therapies for childhood and adolescent anxiety disorders. *Br J Clin Psychol* 2004;**43**:421–36.

## Q What are the effects of cognitive behaviour therapy in children with anxiety disorder?

### METHODS



**Design:** Systematic review with meta-analysis.



**Data sources:** Cochrane Controlled Trials Register, Current Controlled Trials, MEDLINE, EMBASE, PsycINFO, CINAHL, NHS Economic Evaluation Database, National Technical Information Service, Index to Scientific and Technical Proceedings (ISI Web of Science). Hand search of reference lists of recent reviews and trials, journals that had published trials identified by previous stage or that were known to publish trials on treatment of anxiety disorders. Experts in the field were asked to provide any trials that had not been identified by the previous stages (search date 2003).



**Study selection and analysis:** Randomised controlled trials in children aged 18 years or younger with a diagnosis of anxiety disorder, which investigated cognitive behaviour therapy (CBT) versus no treatment, inactive treatment, or alternative treatment. Trials were required to use formal diagnosis as an outcome variable, rather than self report measures. Trials were excluded if participants had obsessive-compulsive disorder, post-traumatic stress disorder, or simple phobia, or if undiagnosed cases of anxiety were included, unless there was a separate analysis for the diagnosed subgroup. Odds ratio of remission after treatment was estimated for each study, and a pooled result obtained. The analysis was intention to treat, and assumed a favourable outcome in the control group and an adverse outcome in the CBT group. Heterogeneity and the relation between study size and effect size were assessed.



**Outcomes:** Remission (established using formal diagnosis methods).

### MAIN RESULTS

Ten studies met inclusion criteria (608 children). Cognitive behaviour therapy increased remission compared with no treatment in children over age 6 years with anxiety disorders (OR 3.27, 95% CI 1.92 to 5.55). No trials were found comparing CBT with alternative treatment.

### CONCLUSIONS

Cognitive behaviour therapy is beneficial in children with anxiety disorders. Further research is needed to investigate the effects of CBT in younger children or in comparison with alternative treatments.

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### NOTES

There was heterogeneity among the studies ( $\chi^2$  (9) = 16.4,  $p = 0.059$ ), and evidence of reduced effect size for larger studies. As the children allocated to control had no treatment, non-specific effects of attention could explain some of the benefit observed.

### Commentary

Childhood anxiety disorders are highly prevalent and often debilitating.<sup>1</sup> Their presentation is less distinct than in adults, with several disorders often appearing to co-occur in one child.<sup>1</sup> Cognitive behaviour therapy (CBT), based on Kendall's "Coping Cat" model,<sup>2</sup> is the most extensively studied treatment for pre-adolescent children with generalised anxiety disorder, separation anxiety disorder, social phobia, and combinations of these disorders.

This paper systematically reviews CBT studies for childhood anxiety, selected based on rigorous criteria. Although statistically sound, its emphasis on diagnostic (versus symptomatic or functional) change is unfortunate, as the degree of anxious comorbidity and anxiety related impairment in children suggest that eliminating specific diagnoses may not always be the most clinically relevant outcome. Nevertheless, the authors convincingly integrate study data to support the efficacy of CBT.

Many aspects of CBT merit further investigation, such as adapting the treatment for younger children and determining the optimal degree of parent involvement. Future studies should examine populations that are more severely affected than those typically studied and CBT should be compared with pharmacotherapy and other treatments. However, in practice, CBT is often combined with pharmacotherapy<sup>3</sup> so studies of this combination may be more relevant than comparisons of the two treatments.

The lack of trained CBT therapists in many communities, and the limited benefits of traditional CBT for anxious children with learning disabilities (given its cognitive focus), or with significant family dysfunction (an ongoing source of anxiety for the child), are sometimes additional barriers to effective treatment. Therefore clinicians should consider CBT (if available) for children and families resembling those participating in studies, but should bear in mind that additional or alternative treatment may be needed in more complex cases.

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1 Bernstein GA, Borchardt CM, Perwien AR. Anxiety disorders in children and adolescents: A review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 1996;**35**:1110–19.

2 Kendall PC. Treating anxiety disorders in children: Results of a randomized clinical trial. *J Clin Child Psychol* 1994;**62**:100–10.

3 Lishko V, Manassis K. Medicated anxious children: Characteristics and cognitive behavioral treatment response. *Can J Psychiatry* 2004;**48**:741–8.