

# The Treatment of Recurrent Abdominal Pain in Children: A Controlled Comparison of Cognitive-Behavioral Family Intervention and Standard Pediatric Care.

Matthew R. Sanders<sup>1</sup>, Ross W. Shepherd<sup>1</sup>, Geoffrey Cleghorn<sup>1</sup> and Hugh Woolford<sup>1</sup>

## 1.1 Aim

This study describes the results of a controlled clinical trial involving 44 7- to 14-year-old children with recurrent abdominal pain who were randomly allocated to either cognitive-behavioral family intervention (CBFI) or standard pediatric care (SPC). We evaluated the effects of a cognitive-behavioral family intervention program on children's pain, the extent of relapse, and the degree of interference of the pain with the child's activities.

## 2.1 Hypotheses

We predicted that family-based treatment would be superior to standard pediatric care in reducing children's pain up to a 12-month follow-up and would be associated with less relapse following treatment and lower levels of interference in the child's daily activities. We also controlled for parents' pre-treatment therapeutic expectancies and examined parents' satisfaction with treatment outcome. Finally, we predicted that child coping and maternal caregiving variables would each independently predict levels of pain at posttreatment after controlling for the pretreatment level of pain.

## 3.1 Results

Both treatment conditions resulted in significant improvements on measures of pain intensity and pain behavior. However, the children receiving CBFI had a higher rate of complete elimination of pain, lower levels of relapse at 6- and 12-month follow-up, and lower levels of interference with their activities as a result of pain and parents reported a higher level of satisfaction with the treatment than children receiving SPC. After controlling for pretreatment levels of pain, children's active self-coping and mothers' caregiving strategies were significant independent predictors of pain behavior at posttreatment.

## 4.1 Findings

The present results add to an increasing body of research showing the value of cognitive-behavioral treatments for a variety of pain problems in children. This research also highlights the usefulness of preparing parents to support their children's self-management behavior. It is consistent with a growing body of research showing that behavioral family interventions that provide skill training for both parents and children can be adapted to a variety of childhood conditions (Dadds, Heard, & Rapee, 1992; Sanders, 1992; Sanders & Dadds, 1993).

## 5.1 Summary and Implications

This study found that both CBFI and SPC were associated with clinically significant improvements in the functioning of children with RAP. Several aspects of the data support the predicted superiority of the combined child- and parent-focused cognitive-behavioral intervention. It would be useful to evaluate the effects of an abbreviated 3- or 4-session or a 1-day intensive program to improve the cost-effectiveness of treatment. Further research is also needed to examine the role of other potential predictors of clinical improvement, including the characteristics of the child's initial level of pain (intensity, duration, and pain behavior), the mode of onset of the pain (e.g., stress-related or after a period of illness), type of treatment received, global adjustment, and other family characteristics.