

## ADHD: Beyond the Child

Attention deficit hyperactivity disorder (ADHD) is a chronic and debilitating disorder affecting a significant number of individuals throughout their childhood and beyond.<sup>1</sup> There is growing awareness that the negative impact of the disorder extends beyond the affected individual to his or her family, place of learning/work, and the wider community. This paper focuses on the impact of ADHD on children’s parents, in particular, the stress they experience in their parenting roles.

Several reports in the literature indicate that mothers of children with ADHD experience increased levels of parenting stress compared with the mothers of non problem children.<sup>2,3,4,5</sup> These elevations in parenting stress begin early,<sup>6</sup> and appear chronic in nature.<sup>7</sup> Evidence is emerging that fathers of children with ADHD also experience increased levels of parenting stress.<sup>3,8</sup>

Elevated levels of parenting stress are associated with disruptions to the parent-child relationship and parenting practices<sup>2,9-12</sup> and disruptions in parent psychological functioning.<sup>10-12</sup> The hypothesised reciprocal relationships between these factors and child behaviour are

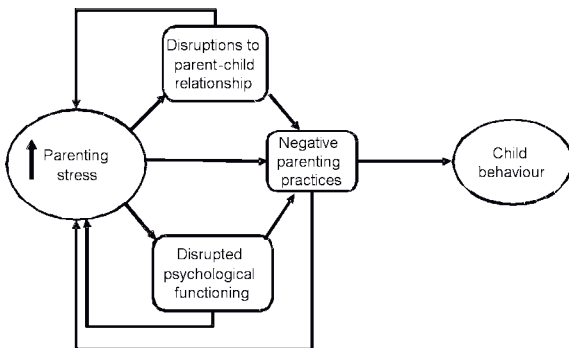


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depicted in figure 1.

Parenting stress is generally understood to arise from characteristics of the parent, the child, and the environment, and interactions among these factors. For families with a child with ADHD the characteristics of the child are thought to be the primary contributor to parenting and family stress.<sup>2,11,13,14</sup> To date three studies have assessed the contribution of a range of parent, child, and family/environmental characteristics to parenting stress in mothers<sup>2,15</sup> and mothers and fathers<sup>3</sup> of children with ADHD. In each of these studies the Parenting Stress Index<sup>16</sup> was used to assess the level of parental stress in the parent-child dyad. This measure



**Figure 1.** Hypothesized links between parenting stress, the parent-child relationship, parent psychological functioning, parenting practices, and child behaviour.

provides a Child Domain (stress perceived to result from child characteristics), Parent Domain (stress perceived to result from parent characteristics), and Total Stress Score.

In all three studies the children’s problem behaviour

contributed significantly to overall levels of parenting stress<sup>2,15</sup> and parenting stress in the child domain.<sup>3</sup> Maternal psychopathology and health status<sup>2</sup> and perceived control over child behaviour<sup>15</sup> also made a significant contribution to mothers' reported parenting stress. Baker<sup>3</sup> found family characteristics made a small, but significant, contribution to parenting stress in the child domain (number of years married, socioeconomic status, and sex of parent) and parent domain (socioeconomic status) parenting stress. Although this latter study included fathers, predictors of parenting stress were not considered separately for mothers and fathers.

We recently assessed the predictors of child domain and parent domain parenting stress in 113 parents (71 mothers and 42 fathers) of 79 children diagnosed with DSM-IV ADHD. Parents completed the Parent Stress Index as well as measures designed to assess depressive symptomology, parenting style and beliefs, family functioning and relationship quality, perceived social support, and child behaviour. Correlational analyses assessed the direction and strength of relationships between scores on these measures and levels of parenting stress, separately for mothers and fathers. The results of these analyses, together with the findings of previous research, were used to guide variable selection and entry for a series of hierarchical multiple regression analyses to identify predictors of parent domain and child domain parenting stress. Levels of parenting stress were found to be elevated for both mothers and fathers in this sample.

Child domain parenting stress, in mothers and fathers, was predicted by child externalizing behaviour, family socioeconomic status, and aspects of parent locus of control. For mothers, and to a lesser extent fathers, the effect of socioeconomic status was mediated by the child externalizing behaviour, i.e., lower socioeconomic status was associated with increased perceptions of externalizing child behaviour which in turn predicted child domain parenting stress. Child externalizing behaviour was the major contributor to child domain parenting stress, explaining over 35% of the variance in reported stress for both mothers and fathers.

Parent locus of control and depressive symptomology predicted parent domain parenting stress in mothers and fathers of children with ADHD. In mothers, the effect of depression was mediated by locus of control, i.e., greater depressive symptomology was associated with a parent locus of control characterized by beliefs of reduced efficacy, increased child control over parent's lives and decreased parental control over child behaviour, which in turn predicted increased parent domain parenting stress for mothers. Child externalizing behaviour and social support network size also made small, but significant, contributions to fathers parent domain stress.

These data indicate that the predictors of parenting stress in mothers and fathers of children with ADHD are similar, **but** not identical. Consistent with previous research, the children's externalizing behaviour emerged as the primary predictor of child domain parenting for mothers and fathers. It made a smaller, but still significant, contribution to fathers' parent domain stress. Parent and family/environmental factors, namely locus of control and socioeconomic status also contributed to child domain parenting stress. For mothers, predictors of parent domain stress

were limited to parent characteristics. In the case of fathers, parent, child, and family/environmental factors all contributed to reported parent domain parenting stress.

The links between elevated parenting stress, disruptions to the parent-child relationship, and parenting practices, together with the distress experienced by the parents themselves, argue for treatment programmes that reduce parenting stress in the families of children with ADHD. Although the importance of considering parents' psychological functioning in the management of ADHD has been acknowledged for some time,<sup>2,17</sup> very few studies have addressed this issue directly. In response we developed and evaluated a nine week, group administered, stress management programme for the parents of children with ADHD.<sup>18</sup>

The content and format of the programme was designed to address parent and environmental characteristics thought to contribute to elevations in parenting stress. Session content focused on the provision of accurate information to assist parents in developing realistic expectations of their children, together with skills training to reduce emotional arousal and to improve communication and problem solving. Sixty-three parents from 42 families participated in a randomized wait-list control trial.

Results demonstrated that for mothers completion of the programme was associated with a significant reduction in parent domain parenting stress together with significant improvements in reported parenting style. A trend toward improved mood was also observed. For fathers completion of the programme was associated with reported improvement in some aspects of parenting style only. Treatment effects were maintained at six and 12-month follow-up. Overall parents were highly satisfied with the programme and no parents voluntarily dropped out of treatment.

The programme's success in reducing parent domain parenting stress is consistent with its focus on reducing parents' emotional arousal through education and skill training. The observed changes in parenting style are consistent with suggestions that elevated parenting stress negatively impacts parenting practices. The lack of significant reduction in child domain parenting stress may be explained by the programme's limited focus on changing actual child behaviour.

Possible explanations for differential effects of the programme for mothers and fathers include lower levels of pre-treatment stress in fathers compared with mothers, fathers attendance prompted by a sense of duty to partners rather than perceived need, programme content based on predictors of maternal rather than paternal parenting stress, and group facilitation by female group leaders.

The negative impact of elevated parenting stress on parents, children, parenting practices, and the parent-child relationship argue strongly for the inclusion of programmes such as the one described in the comprehensive management of ADHD. The treatment of ADHD should focus on enhancing parents' coping resources as well as directly targeting the child's symptoms of ADHD and associated difficulties.

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