

Case Series: Brief Parent-Child Group Therapy for Childhood Anxiety Disorders Using a Manual-Based Cognitive-Behavioral Technique

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ABSTRACT

Objective: To report on a brief parent-child group therapy program for children with anxiety disorders. **Method:** Twenty-four children with an anxiety disorder and their parents participated in a 10-session treatment. Children were evaluated at pretreatment (T_1), posttreatment (T_2), 12-month follow-up (T_3), and 36-month follow-up (T_4). Ten children were also assessed on entering a waiting period (T_0). **Results:** There were no significant symptomatic changes between T_0 and T_1 . Anxiety symptoms decreased significantly during the treatment and follow-up periods. Depressive symptoms changed only during the follow-up period. The percentage of children with no current anxiety disorder was 71% at T_2 and 91% at T_4 . Children of mothers with an anxiety disorder improved more than children of nonanxious mothers, whereas the anxiety level of anxious mothers remained stable. **Conclusions:** Brief parent-child group psychotherapy may serve as a time-limited, cost-effective, and efficient intervention. *J. Am. Acad. Child Adolesc. Psychiatry*, 2000, 39(10):1309-1312. **Key Words:** anxiety disorder, parent-child, group psychotherapy.

Childhood anxiety causes marked distress and has implications for adult functioning (Kendall, 1992). The estimated incidence of childhood anxiety disorders ranges from 5.7% to 17.7% (Costello and Alford, 1995), particularly overanxious disorder (2.6%-15.4%), separation anxiety disorder (5%), and simple phobia (5%). The higher prevalence of anxiety disorders in parents of children with anxiety disorders than in parents of nonanxious children (Last et al., 1991; Weissman, 1988) supports the assumptions that family dynamics propagate morbidity and that genetic load may magnify familial factors (Barrett et al., 1996).

Family and cognitive-behavioral individual psychotherapies have been proven effective in the treatment of children with anxiety disorders (Beidel and Francis, 1995; Kendall, 1994). However, economic restraints have prompted research into more cost-effective interventions (family, group, or integration of both) (Trad, 1994).

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Data on cognitive-behavioral family-group treatment yielded a significant proportion of disorder-free children after treatment (65%) and 12 months later (85%) (Barrett, 1998; see also Mendlowitz et al., 1999).

The aim of this study is to present the results achieved with our child-parent group treatment program.

METHOD

Subjects

Participants were 24 consecutive children (14 boys, 10 girls) attending the Child and Adolescent Clinic of the Tel-Aviv Community Mental Health Center and their 40 parents (8 single-parent families). Children were 6 to 13 years old (mean \pm SD = 9.6 \pm 1.7 years) with a principal diagnosis of separation anxiety disorder (52%), overanxious disorder (4%), or both (44%) and no prior drug treatment. Children with neurological disorders or mental retardation were excluded. Co-morbid conditions included simple phobia (17%), attention-deficit/hyperactivity disorder (ADHD) (25%), chronic tics (12%), enuresis (8%), and minor depressive disorder, mild obsessive-compulsive disorder, and encopresis (4% each).

Twelve mothers (50%) had no anxiety disorder, 11 (46%) had generalized anxiety disorder (one co-morbid with chronic minor depressive disorder), and 1 (4%) had panic disorder. Thirteen fathers (82%) had no anxiety disorder and one each (6%) had major depressive disorder, major depressive disorder with organic disorder, and obsessive-compulsive disorder. Families with a Global Assessment of Relational

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Functioning (American Psychiatric Association, 1994) score of less than 20 were excluded (range: 41-81, mean = 61). All participants agreed to participate, and parents gave a written informed consent,

Assessment Time-Points

- Assessment time-points were as follows:
- o Waiting list (T₀): 10 children served as controls and were assessed on entering the 10- to 15-week waiting period,
 - o Pretreatment (T₁): the week before the beginning of treatment,
 - o Posttreatment (T₂): the week after the last treatment session,
 - o 12-month follow-up (T₃): 17 children (first 3 groups) were assessed 1 year after the last treatment session,
 - o 36-month follow-up (T₄): 22 families were interviewed 3 years after the end of treatment (2 could not be located),

Measures

Two senior child and adolescent psychiatrists (S.E" ET) diagnosed the children at T₁, T₂, and T₄ using the semi-structured Schedule for Affective Disorders and Schizophrenia for School-Age Children (KSADS) (Orvaschel and Puig-Antich, 1987). Children were included if diagnostic agreement was achieved (96%). The assessment (T₀ to T₄) included the Revised Children's Manifest Anxiety Scale (RCMAS) (Reynolds and Richmond, 1978), which yields a total score and 3 symptom domains (Physiological, Worry, and Concentration), and the Children's Depression Inventory (CDI) (Kovacs, 1985), a 27-item self-report scale.

Parents were interviewed with the Schedule for Affective Disorders and Schizophrenia-Lifetime version (SADS-L) (Endicott and Spitzer, 1978). Anxiety and depressive symptoms were assessed at T₁ and T₂ with the State-Trait Anxiety Inventory (Spielberger, 1983), and the Beck Depression Inventory (Beck et al" 1961). Family functioning was assessed at T₄ with the Global Assessment of Relational Functioning scale (American Psychiatric Association, 1994),

Treatment Protocol

The program (Toren et al" 1998) consists of 10 weekly group sessions (80 minutes each) of 3 to 6 child-parent(s) dyads/triads. Each group had 2 therapists (PT, B.R.). A neutral observer (S.K.) confirmed protocol adherence.

The objective of the first session is to acquaint the participants with each other and to establish the group's goals and rules. The children are invited to describe cues of anxiety-provoking situations and the accompanying emotional, cognitive, and somatic components of the experience.

Sessions 2 through 6 focus on practicing relaxation techniques, discussing advantages and disadvantages of anxiety (session 2); identifying automatic self-talk and feelings accompanying anxiety-provoking situations (session 3); identifying cognitive pitfalls (e.g., unrealistic or negative thinking; emotional reasoning; dichotomous, perfectionist, and magical thinking) (session 4); recognizing avoidant strategies and triggering cues (session 5); learning graded exposure to anxiety provoking situations; turning anxious arousal into a cue for eliciting coping strategies; modifying anxious self-talk into coping self-talk; building realistic self-evaluations and developing self-reward strategies (session 6),

In sessions 7 through 9, participants exercise new coping skills, develop hierarchies of anxiety-provoking situations, and establish expected duration and degree of anxiety exposure. Problem-solving techniques and creative thinking are implemented.

Session 10 is dedicated to discussing achievements and future tasks and to evaluating the group work,

RESULTS

Table 1 summarizes the symptomatic changes of the children in 5 child-parent groups. Multivariate analyses of variance with repeated measures revealed no significant changes from T₀ to T₁ in either anxiety (Total RCMAS: $F_{1,10} = 1.81, P > .05$) or depression (CDI: $F_{1,10} = 1.46, P > .05$). A significant decrease appeared at T₂ in the Total RCMAS score ($F_{1,23} = 11.72, P < .005$) and in the Physiological ($F_{1,23} = 8.23, P < .009$) and Worry ($F_{1,23} = 7.12, P < .02$) domains, but not in the CM ($F_{1,23} = 0.92, P > .05$).

We found significant decreases from T₁ to T₃ in depressive symptoms ($F_{1,16} = 10.94, P < .005$) as well as in all anxiety domains: Total RCMAS ($F_{UG} = 36.93, p < .0001$), Physiological ($F_{1,16} = 27.87, P < .0001$), Worry ($F_{1,16} = 27.43, P < .0001$), and Concentration ($F_{UG} = 5.47, P < .05$). There were also significant decreases in anxiety between T₂ and T₃ but not in depressive symptoms: Total RCMAS .. S, $F_{UG} = 10.55, P < .005$; Physiological, $F_{UG} = 13.68, P < .002$; Worry; $F_{1,16} = 5.96, P < .05$; Concentration, $F_{UG} = 4.92, P < .05$; CDI, $F_{1,16} = 3.39, P > .05$.

TABLE 1
Anxiety and Depression Symptoms of the Children at Four Time Points (Means ± SD)

	To: Waiting List (n = 11)	T ₁ : Pretreatment (n = 24)	T ₂ : Posttreatment (n = 24)	T ₃ : 1-Year Follow-up (n = 17)
RCMAS				
Total ^{a,b,c}	13.6 ± 5.3	11.6 ± 5.1	8.5 ± 5.6	4.1 ± 4.0
Physiological ^{a,b,c}	5.1 ± 1.9	4.5 ± 2.4	3.3 ± 2.1	1.5 ± 1.4
Concentration ^c	2.3 ± 2.2	1.5 ± 1.5	1.3 ± 1.6	0.6 ± 1.5
Worry ^{a,b,c}	6.3 ± 2.5	5.6 ± 2.5	3.9 ± 2.7	1.9 ± 1.9
CDI ^b	11.5 ± 3.6	9.6 ± 5.8	8.1 ± 6.9	4.9 ± 3.5

Note: Superscript letters indicate significant differences between time points T₁-T₂, T₂-T₃, and T₁-T₃, respectively. RCMAS = Revised Children's Manifest Anxiety Scale; CDI = Children's Depression Inventory.

Seventeen children (70%) at T₂ and 20 children (91%) at T₄ no longer met the *DSM-III-R* criteria for any current anxiety disorder. The 2 children who still met criteria for an anxiety disorder at T₄ had comorbid AD/HD and their mothers had an anxiety disorder.

Compared with children of nonanxious mothers, children of mothers with an anxiety disorder had at T₁ fewer concentration problems ($F_{1,23} = 5.61, P < .05$), at T₂ fewer physiological symptoms ($F_{1,22} = 5.0, P < .05$), and at T₃ fewer symptoms of anxiety (Total RCMAS: $F_{1,15} = 14.2, P < .005$; Physiological: $F_{1,15} = 12.1, P < .005$; Worry: $F_{1,15} = 6.17, P < .05$; Concentration: $F_{1,15} = 5.93, P < .05$) and depression ($F_{1,15} = 6.4, P < .05$) (Table 2).

The state anxiety of anxious mothers was high before and after the treatment (means = 44.6 and 41.4, respectively; $F_{1,13} = 1.27, P > .05$). In the nonanxious mothers state anxiety was lower at T₁ and tended to decrease at T₂ compared with anxious mothers (means = 36.5 and 32.5, respectively; $F_{1,9} = 4.76, p = .057$).

DISCUSSION

This study demonstrates a significant decrease in the anxiety of children with an anxiety disorder following a 10-session parent-child group treatment, with no symptomatic changes during the waiting-list period. Depressive symptoms decreased only at the 12-month follow-up.

At the end of the program, 70% of the children no longer met the *DSM-III-R* criteria for any current anxiety disorder (compared with 65% in Barrett's [1998] study). Symptoms of anxiety and depression continued to decrease 1 year later and, by the 3-year follow-up, 91% of the children were diagnosis-free. The 2 children with an anxiety disorder diagnosis at T₄ had also ADHD, and their mothers had an anxiety disorder, suggesting that our protocol needs to be complemented in children with these characteristics.

A combination of factors may have contributed to the observed improvement. Some relate directly to the child (mastering anxiety, acquiring cognitive-behavioral tools), whereas others relate to the participation of the parents. For instance, Mendlowitz et al. (1999) found that parental involvement in parent-child group interventions for anxiety disorders affects mainly the use of active coping strategies by the child.

In our program, the parents are viewed as facilitators of the process by enabling age-appropriate development. Their own anxiety however, is neither addressed directly nor alleviated by cognitive-behavioral techniques. This approach differs from Barrett's (1998), in which the parents are trained in cognitive-behavioral techniques and function as cotherapists within a systemic group process that aims at forming a parent-child "expert team." Our study shows that it is possible to achieve similar short- and long-term results with a more cost-effective approach (13.3 compared with 24 treatment hours in Barrett's program).

The greater improvement in children of anxious mothers may seem counterintuitive because their reported anxiety remained high. Perhaps their benefit from the therapeutic process was mainly in improving their parental functions. Whether these had been compromised prior to therapy or they could better apply the learned skills, calls for further exploration.

The therapeutic effect seems ongoing and longstanding. However, the lack of a control group for the 1-year follow-up is a significant limitation because posttreatment improvement may cover changes due to normal development. Moreover, a larger sample providing more statistical power will allow the adoption of more conservative significance levels to reduce experiment-wise error.

TABLE 2
Anxiety and Depression Symptoms of the Children of Mothers With and Without an Anxiety Disorder at Three Time Points (Means ± SD)

Mother- (n = 7)	T3: 1-Year Follow-up		T2: Posttreatment		T1: Pretreatment	
	Mother+ (n = 10)	Mother- (n = 10)	Mother+ (n = 14)	Mother- (n = 10)	Mother+ (n = 14)	Mother- (n = 10)
7.3 ± 3.9	1.8 ± 2.2	10.1 ± 6.6	7.4 ± 4.8	12.0 ± 4.8	11.3 ± 4.8	11.3 ± 4.8
2.6 ± 1.3	0.7 ± 0.9	4.4 ± 2.1	2.6 ± 1.9	4.3 ± 2.1	4.6 ± 2.1	4.6 ± 2.1
1.6 ± 2.1	0.0 ± 0.0	1.7 ± 2.2	0.9 ± 1.1	2.3 ± 1.7	0.9 ± 1.1	0.9 ± 1.1
3.1 ± 1.9	1.1 ± 1.4	4.0 ± 3.2	3.9 ± 2.5	5.4 ± 2.0	5.7 ± 2.0	5.7 ± 2.0
7.1 ± 3.0	3.4 ± 3.0	8.0 ± 7.0	9.1 ± 7.1	9.9 ± 6.7	9.4 ± 6.7	9.4 ± 6.7

Note: Superscript letters indicate significant differences ($p < .05$) between subgroups at T₁, T₂, T₃, respectively. RCMAS = Revised Children's Manifest Anxiety Scale; CDI = Children's Depression Inventory.

* Statistical significance could not be calculated owing to the absence of variance in one subgroup.

Clinical Implications

The manual-based parent-child group psychotherapy proved to be a cost-effective mode of intervention for children with anxiety disorders, achieving significant short- and long-term symptomatic reduction. That 33% of the children with comorbid ADHD still had an anxiety disorder at the 36-month follow-up suggests that a specific adaptation of the protocol might be needed for ADHD comorbidity.

By involving the parents in the treatment, we may allow a continuing improvement long after the treatment ends. Future studies should assess long-term effects of alternative models (child only, parent only).

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- Perceived Consequences of Teenage Childbearing Among Adolescent Girls in an urban Sample. Jennifer B. unger, PhD, Gregory B. Molina, BA, Lorena Teran, BA
- Purpose:* The purpose of this study was to examine the perceived positive consequences of teenage childbearing among female adolescents, and to determine whether perceived consequences of teenage childbearing are associated with other attitudes and sexual risk behaviors. *Methods:* The sample consisted of 584 female students attending three urban high schools in Los Angeles, California. The respondents' mean age was 15.8 years, and 72% were Hispanic/Latina. Respondents completed a paper-and-pencil survey assessing their attitudes and risk behaviors relevant to teenage pregnancy. Multiple regression and logistic regression analyses were used to examine the associations between perceived consequences of teenage childbearing and demographic variables, educational variables, parental characteristics, psychosocial variables, attitudes, and sexual behavior. *Results:* Higher scores on a scale of perceived positive consequences of teenage childbearing were associated with increased risk of sexual intercourse and unprotected sexual intercourse. Higher scores on this scale were found among girls who were Latinas, were non-U.S. natives, had low levels of expected educational attainment, had low parental monitoring, had good communication with parents, and intended to have many children. *Conclusion:* Potential strategies for preventing adolescent pregnancy include educating girls about the difficulties of teenage childbearing, countering their positive illusions about the expected benefits, and teaching them more adaptive ways to meet their emotional needs. *J Adolesc Health* 2000;26:205-212. Reprinted with permission of Elsevier Science, copyright 2000 by The Society for Adolescent Medicine.