Objective: To evaluate a psychoeducational intervention program for parents of pediatric cancer patients, using cognitive and behavioral techniques.

Methods: Parents were randomly assigned to an intervention (n = 39) and a control condition (n = 42). Baseline assessment took place at diagnosis. Short-term effects were measured immediately after the intervention, long-term effects six months later. Control parents received standard care. Intervention parents received, in addition, a manual-guided program during the first six months following the diagnosis.

Results: With time all parents became significantly less psychologically distressed. However, no between-group differences were noted in psychological functioning, satisfaction with support, and intensity of emotions immediately postintervention and six months later.

Conclusions: Although the clinical evaluation of the intervention was positive, it appeared that a structured intervention program as described in this study was not any more effective than standard care.

Key words: childhood cancer; parental adjustment; psychological intervention.

Parents and children, when confronted with childhood cancer, face long periods of intensive treatment with upsetting side effects and continuing uncertainty about survival. The literature shows contradictory findings as to how well parents adjust. While some researchers have focused on the capacity of parents to cope well in their day-to-day functioning (Greenberg, Kazak, & Meadows, 1989; Kupst & Schulman, 1988), others have found higher levels of parental distress at one year postdiagnosis than in the population at large (Hoekstra-Weebers, Jaspers, Kamps, & Klip, 1998; Sawyer, Antoniou, Toogood, Rice, & Baghurst, 1993). Many parents reported feelings of uncertainty and loneliness, even long after cessation of treatment (Van Dongen-Melman et al., 1995). Some researchers have pointed out ongoing concerns of parents with the physical and mental development of their child and with potentially decreased opportunities for the future (Greenberg & Meadows, 1992).

Psychological interventions may help parents cope with these ongoing stresses and enhance their adjustment to their child's cancer. Parents experience a variety of emotions, such as shock, disbelief, fear, anxiety, hopelessness, sadness, anger, guilt and loss of control, following the diagnosis. These emotions are normal, in light of the situation. However,
when the intensity of such emotions is high, comprehension and recall of the information about diagnosis, treatment, and side effects may be blocked (Hogbin & Fallowfield, 1989). Also, spouses could express their emotions more adaptively, because recognizing and understanding each other's feelings can lead to relief and acceptance (Shapiro & Shumaker, 1987) and prevent marital discord. Likewise, open communication with the pediatric oncology team, with others, and within the family should be encouraged since open communication has been linked to the adjustment of parents and their children to the diagnosis and treatment (Kupst & Schulman, 1988). Furthermore, a lack of support was associated with higher levels of psychological distress (Kazak & Meadows, 1989). Attention should be given to social skills to elicit the support needed. Moreover, parents may focus on their ill child to the extent that they neglect their own needs and those of other family members (Sloper & While, 1996). The importance of family and maintaining a healthy lifestyle should be stressed.

We know of only one study that investigated the effectiveness of an intervention for parents of newly diagnosed children with cancer. Kupst and Schulman, in their longitudinal study (1988), compared three groups of parents of children with leukemia: parents who had had frequent contacts with a directive therapeutic focus during treatment; parents who had had a less intensive outreach through contacts initiated by the family; and parents who received the usual, available care. The intervention, which lasted two years, focused on understanding the diagnosis, treatment and consequences of the illness, coping with stress, utilizing resources available for dealing with medical issues, and the effect of the illness and treatment on family, school, and social interactions. Whereas an intervention appeared to have been beneficial in the early outpatient phase for mothers only, it seemed to have no effect for parents at 1, 2, or 6–8 years postdiagnosis. However, the assessment of their adjustment and coping was mainly based on ratings by the staff, on clinical observations, and on interviews.

Because of the lack of empirical studies of the effects of an intervention for parents of pediatric cancer patients, the authors undertook a controlled, randomized, longitudinal intervention study with the aims of reducing psychological distress in parents of children with cancer, regulating the intensity of emotions and helping to elicit the support needed. This then is the first study to examine short- and long-term effects of a structured intervention, using standardized questionnaires. The following hypotheses were formulated: (1) parents in the intervention condition will experience less psychological distress than parents in the control condition, (2) parents in the intervention condition will be more satisfied with the support they receive than parents in the control condition, (3) parents in the intervention condition will be better able to regulate the intensity of their emotions than parents in the control condition, 6 and 12 months after the initial diagnosis.

**Methods**

**Participants**

The parents of all consecutive, newly diagnosed children with cancer, between September 1991 and December 1993, were eligible for the study. Parents of children with a short life expectancy were excluded, as were those whose Dutch was limited. Thus, 192 parents of 98 children were approached and 120 parents (62.5%) agreed to be randomized. Sixty-one participating parents (30 couples and 1 widow) were randomly assigned to the intervention condition and 59 parents (28 couples and 3 mothers) to the control condition. Of the 61 parents in the intervention condition, 9 couples did not complete the intervention. Reasons given were lack of time (mentioned by 10 parents), no benefit expected (6 parents), concern about emotional equilibrium (2 parents). One couple, who lost their child in the first six months following diagnosis, was not approached for reassessment. Another couple, who lost their child in the next six months, was subsequently excluded. Therefore, data from 39 parents (19 couples and 1 widow) in the intervention condition could be evaluated. Four couples and one mother in the control condition subsequently were excluded due to their child's death. Three couples and two mothers refused reassessment. Therefore, data from 42 parents (21 couples) in the control condition were evaluable.

There were 40 fathers and 41 mothers in the trial, mean age = 36.6, SD = 5.4 (range: 24–53 years). All but the widow were married/cohabiting. Educational level ranged from 1 (elementary school) to 7 (university), M = 3.2, SD = 1.5. The
sample is representative of the population of the
northern part of the Netherlands. Their children
numbered 23 boys and 18 girls, mean age = 6.4,
$SD = 4.7$ (range: 0–16 years). The medical diagnoses
included leukemias ($n = 17$), malignant lymphomas
(7), Wilms' tumor (5), brain tumors (4), soft tissue
sarcomas (4), endocrine tumors (2), and other (2).

**Procedure**

The pediatric oncologist introduced the study to the
parents immediately after the diagnostic process
(range: 2–21 days, depending on the type of malignancy). The researcher (first author) explained the
study and randomization procedure. Written in-
formed consent was obtained according to institu-
tional guidelines. Parents were randomly assigned
to the control group, who would receive standard
care and attention, or to the intervention group,
who, in addition to standard care, received the in-
tervention (parents drew one of two envelopes in
which a letter indicated in which group they were
placed). Parents were asked to complete question-
naires within 14 days after consent (T1); 6 months
later, which was immediately postintervention (T2);
and at 12 months (T3) postdiagnosis, 6 months
after completion of the intervention.

Standard care, consisting of the routine medical
and psychosocial care provided by the pediatricians
and nurses during treatment, was linked to treat-
ment and assumed to be similar for parents in both
conditions. A social worker offered psychosocial
help to parents shortly after diagnosis. Further con-
tacts with the social worker were at the initiative of
the family.

The manual-guided intervention consisted of
eight 90-minute sessions, during the first six
months following diagnosis (a three-week interval
between sessions), and involved parent(s) and the
psychologist (second author). The sessions were
held in a private room in the hospital. The interven-
tion was psychoeducational; cognitive-behavioral
techniques were used (Fawzy, Fawzy, Arndt, & Pas-
nau, 1995). Attention was paid to the expression of
emotions, to the identification and challenging of
negative automatic thoughts, to the encourage-
ment of problem-focused coping skills, to commu-
nication and assertiveness skills, and to informa-
tion about the possible psychosocial consequences
of the treatment for the ill child and the whole family.
All topics were discussed in the course of the inter-
vention with all couples, although the exact con-
tent of a session could differ between parents based
on the topic brought up by them. For example, dis-
cussion and intervention could be adjusted to the
developmental level of the child. To guarantee pri-
vacy and to give optimal opportunity to discuss
their problems, sessions with couples (in one case
with the widow) were chosen.

**Instruments**

Psychological functioning was assessed through use
of three instruments:

1. The Goldberg General Health Questionnaire
   (GHQ), 12-item version (Goldberg & Williams,
   1988), is a self-report questionnaire for the detec-
tion of nonpsychotic psychiatric disorders. The
questions focused on breaks in normal functioning.
Those who indicated that their symptoms were un-
changed or had decreased received a score of 0,
while those who reported that their symptoms had
increased somewhat or greatly received a score of 1
(range for the GHQ-12 was therefore 0–12). The
alpha coefficients were .86, .89, and .91 for the
three measurements in this study. The GHQ can
also be used to detect respondents with a clinically
elevated level of distress. A conservative cut-off
score of three was selected.

2. The Symptom Check List (SCL) (Derogatis,
   1977) is a widely employed 90-item self-report ques-
tionnaire of psychiatric symptoms. Alphas ranged
from .97 to .98 for the three measurements. Item
scoring ranged from "not at all" (1) to "very
much" (5).

3. The State-Trait Anxiety Inventory-State
   (Spielberger, Gorsuch, & Lushene, 1970), a 20-item
questionnaire, measured the transitory emotional
condition of tension perceived by the respondents.
Items could be scored on a 4-point scale ranging
from "not at all" (1) to "very much" (4). The alphas
in this study ranged from .94 to .96 for the three
measurements.

Social support was measured with the Social
Support List-Discrepancies (SSL-D) (Sonderen,
1991). The SSL-D, a 34-item questionnaire, assessed
the respondent's (dis)satisfaction with support re-
cieved from his or her network. Higher scores de-
note more dissatisfaction. The alphas ranged from
.94 to .95 for the three measurements.

Intensity of emotions was tapped with a self-
designed intensity of emotions list. This list had
two subscales, one for negative emotions, the other for positive feelings. Negative emotions (16 items, range from 1 = never to 4 = often, Cronbach's alpha ranged from .87 to .89 for the three measurements) included guilt, anger, fear, loss of control, sadness, despair, and shame. Parents were asked to respond to such questions as: How often do you feel sad because your child has to undergo such extensive treatment? Do you fear losing your child? Do you feel guilty because you think you were late in recognizing that something was seriously wrong with your child? Do you feel angry that your child has cancer? The second subscale, positive emotions (4 items, range from 1 = never to 4 = often, alphas ranged from .60 to .72) included such questions as: Do you enjoy things more when your child is happy? Do you feel that you are doing everything in your power to ensure that your child will get well? Do you feel that you are living with heightened awareness?

Reliability and validity of the GHQ (Koeter & Ormel, 1991), SCL (Arrindell & Ettema, 1986), STAI-S (Ploeg, Defares, & Spielberger, 1981) and SSL-D (Sonderen, 1993) are well-established for the Dutch population and normgroup data are available.

Statistical Analyses

Analyses were performed separately for fathers and mothers. T tests for differences between means of Time 1 were employed to detect whether fathers and mothers in the two conditions were equal at baseline. Repeated measures analyses of variance (ANOVA) were performed to assess main effects of condition (control or intervention), of time, and of an interactive effect of condition and time on the variables in the study. Change scores were computed for each group by calculating the difference between T1 and T2, and T1 and T3. T tests were then performed to determine differences between the mean change scores to find out if one group changed more with time than the other. The Bonferroni approach was used in all analyses to minimize the risk of chance findings due to the number of statistical tests performed in this study in relation to the sample size. Alpha was set at a more stringent level of $p < .01$. Effect sizes of condition were computed with the formula: mean change intervention group T1-T3 minus mean change control group T1-T3/SD control group T1-T3, and effect sizes of time with the formula: mean T3-mean T1/SD T1 for the control and the intervention group.

Results

Demographic Characteristics. Parents in the intervention condition were similar to the parents in the control condition with respect to gender, age, marital status, and education. There were no differences in child age, gender, or medical diagnosis.

Drop-out Bias. The study group (control and intervention parents, $n = 81$) was compared to the parents ($n = 39$) who dropped out of the trial (namely, the parents who did not complete the intervention, $n = 18$, parents whose children had died, $n = 13$, and refusers for T2 and/or T3, $n = 8$). There were no differences between these two groups on the demographic variables identified above. The study group and the trial drop-out group were also compared on the outcome variables (psychological functioning, social support, and intensity of emotions) used in this study. There were no differences between these two groups ($t$ tests for differences between means) on any of these variables, at baseline. The absence of differences is important, when considering the issue of generalization.

Standard Care. Since contact with a social worker was at the initiative of the parents, there may have been differences between parents in the two conditions in the number of meetings. No differences (unpaired $t$ tests) were found. The mean number of contacts within the first 14 days following diagnosis (T1) was 1.1, $SD = 1.2$, range: 0–5. The mean number of contacts in the following 6 months (T2) was 1.8, $SD = 2.0$, range 0–8, and in the next 6 months (T3), $M = 0.5$, $SD = 1.1$, range: 0–5, showing that the number of contacts was limited.

Baseline Assessment. There were no significant differences between the mean scores of the fathers and of the mothers in the two conditions, at baseline, in psychological distress (GHQ), psychiatric complaints (SCL), state anxiety, negative and positive emotions, and dissatisfaction with support (results for mothers are depicted in Table I, fathers' pattern of results is comparable and therefore not shown).

Psychological Functioning. Repeated measures ANOVA showed a significant effect of time for all measures of psychological functioning for both fathers and mothers. Parents experienced less distress in all these areas. No effect of condition was found for fathers or mothers, nor an interactive effect of time and condition (Table II). $T$ tests between the mean change scores of T1-T2 and of T1-T3 indicated that neither fathers nor mothers in the intervention
Table I. Means and Standard Deviations for Study Measures for Mothers at Diagnosis (T1), at 6 (T2) and at 12 Months (T3), of the Change Scores, and Effect Sizes of Time (d)

<table>
<thead>
<tr>
<th>GHQ</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>6.0 (3.4)</td>
<td>4.5 (3.9)</td>
<td>2.9 (3.8)</td>
<td>1.52 (3.5)</td>
<td>3.14 (4.0)</td>
<td>0.92</td>
</tr>
<tr>
<td>I</td>
<td>7.5 (1.9)</td>
<td>5.3 (3.8)</td>
<td>3.3 (3.6)</td>
<td>2.15 (2.9)</td>
<td>4.20 (3.5)</td>
<td>2.21</td>
</tr>
<tr>
<td>SCL</td>
<td>131.5 (25.3)</td>
<td>123.3 (28.0)</td>
<td>120.8 (29.2)</td>
<td>8.19 (26.5)</td>
<td>10.76 (28.1)</td>
<td>0.43</td>
</tr>
<tr>
<td>I</td>
<td>146.3 (27.3)</td>
<td>131.6 (27.6)</td>
<td>126.9 (25.0)</td>
<td>14.65 (18.3)</td>
<td>19.40 (20.6)</td>
<td>0.71</td>
</tr>
<tr>
<td>Stais</td>
<td>48.2 (11.6)</td>
<td>45.4 (13.5)</td>
<td>41.6 (10.4)</td>
<td>2.76 (12.3)</td>
<td>6.57 (12.3)</td>
<td>0.57</td>
</tr>
<tr>
<td>I</td>
<td>53.1 (9.2)</td>
<td>46.9 (10.7)</td>
<td>41.9 (10.9)</td>
<td>6.15 (7.3)</td>
<td>11.20 (11.2)</td>
<td>1.22</td>
</tr>
<tr>
<td>Dissup</td>
<td>41.0 (10.3)</td>
<td>42.4 (11.9)</td>
<td>42.9 (13.1)</td>
<td>-1.38 (9.2)</td>
<td>-1.90 (9.5)</td>
<td>0.18</td>
</tr>
<tr>
<td>I</td>
<td>42.8 (10.5)</td>
<td>40.9 (9.6)</td>
<td>43.6 (8.9)</td>
<td>-1.85 (10.0)</td>
<td>-0.80 (10.2)</td>
<td>0.08</td>
</tr>
<tr>
<td>Emoneg</td>
<td>2.3 (0.5)</td>
<td>2.1 (0.6)</td>
<td>2.0 (0.6)</td>
<td>0.13 (0.3)</td>
<td>0.23 (0.3)</td>
<td>0.46</td>
</tr>
<tr>
<td>I</td>
<td>2.3 (0.4)</td>
<td>2.1 (0.4)</td>
<td>2.0 (0.3)</td>
<td>0.22 (0.3)</td>
<td>0.35 (0.3)</td>
<td>0.88</td>
</tr>
<tr>
<td>Emopos</td>
<td>3.2 (0.4)</td>
<td>3.1 (0.5)</td>
<td>3.2 (0.5)</td>
<td>0.08 (0.4)</td>
<td>0.02 (0.4)</td>
<td>0.05</td>
</tr>
<tr>
<td>C</td>
<td>3.1 (0.4)</td>
<td>3.1 (0.5)</td>
<td>3.1 (0.5)</td>
<td>0.00 (0.4)</td>
<td>-0.05 (0.6)</td>
<td>0.13</td>
</tr>
</tbody>
</table>

C = control group (n = 21), I = intervention group (n = 20), GHQ = General Health Questionnaire (range: 0-12), SLC = Symptom Check List (range: 90-450), Stais = state anxiety (range: 20-80), Dissup = dissatisfaction with support (range: 34-136), Emoneg = negative emotions (range: 1-4), Emopos = positive emotions (range: 1-4).

Condition changed significantly any more than those in the control condition (Table I). Parents were significantly less psychologically distressed with time, but there was no short- nor a long-term effect of the intervention (hypothesis 1 rejected).

At diagnosis, 88% of the fathers and 90% of the mothers were psychologically distressed on a clinically elevated level (GHQ). Six months later 63% and 68%, respectively, and 12 months postdiagnosis 38% of the fathers and 44% of the mothers scored above case-level. There was no difference in percentage of cases between parents in the two conditions. In a normgroup (a representative, at random selected community group, n = 3,232, age range 18-65 [Koeter & Ormel, 1991]) 15% cases were found.

Social Support. Repeated measures ANOVA indicated no significant effect of condition, no effect of time, nor an interactive effect of time and condition for dissatisfaction with support for fathers or for mothers (Table II). T tests between the mean change scores of T1-T2 and T1-T3 of the fathers in the two conditions and those of the mothers failed to yield significant differences (Table I). So fathers and mothers in the two conditions were similar in that they remained equally satisfied with the support they received (hypothesis 2 rejected).

Emotions. Repeated measures ANOVA showed a significant decrease of intensity of negative emotions for both fathers and mothers as the study progressed. No change over time was discovered for intensity of positive emotions. No effect of condition was found, nor an interactive effect of time and condition for positive or negative emotions (Table II). T tests between the mean change scores of T1-T2 and T1-T3 of the fathers in the two conditions and those of the mothers did not show significant differences (Table I) (hypothesis 3 rejected).

Effect Sizes. There is a medium effect size of condition for fathers and mothers on intensity of negative emotions and for mothers on state anxiety. All other effect sizes for condition are small.

Discussion

This is the first prospective, randomized study to evaluate the effectiveness of a manualized intervention for parents of pediatric patients with solid and nonsolid malignancies, using standardized questionnaires. The results showed that an intervention, as described above, did not have additional beneficial effects on psychological functioning, on the intensity of negative and positive emotions, or on
Table II. Repeated Measures Analysis of Variance: Effects of Treatment, of Time, and Interactive Effect of Treatment and Time, and Effect Sizes of Treatment (dcon)

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA</th>
<th>Fathers (n = 40)</th>
<th>Mothers (n = 41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>sign.</td>
<td>dcon</td>
</tr>
<tr>
<td>GHQ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>14.96</td>
<td>&lt; .001</td>
<td>0.29</td>
</tr>
<tr>
<td>Condition</td>
<td>0.12</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>0.75</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>SCL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>3.88</td>
<td>&lt; .01</td>
<td>0.02</td>
</tr>
<tr>
<td>Condition</td>
<td>0.00</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>0.01</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Stais</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>7.10</td>
<td>&lt; .001</td>
<td>0.30</td>
</tr>
<tr>
<td>Condition</td>
<td>0.00</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>0.52</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Dissup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>0.42</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Condition</td>
<td>0.06</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>0.97</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Emoneg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>14.85</td>
<td>&lt; .001</td>
<td>0.37</td>
</tr>
<tr>
<td>Condition</td>
<td>0.27</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>1.93</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Emopos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>2.41</td>
<td>NS</td>
<td></td>
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<tr>
<td>Condition</td>
<td>0.11</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>0.38</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

GHQ = General Health Questionnaire, SLC = Symptom Check List, Stais = state anxiety, Dissup = dissatisfaction with support, Emoneg = negative emotions, Emopos = positive emotions.

dissatisfaction with support. These results are consistent with the intervention study for parents of pediatric leukemia patients by Kupst & Schulman (1988).

The study did indicate that both fathers and mothers in the intervention and in the control condition were significantly less psychologically distressed with the passage of time and that the intensity of negative emotions decreased. No time effects were found for intensity of positive emotions and dissatisfaction with support.

An explanation for the absence of an effect of the intervention may be that the most powerful predictor of improvement or change seemed to be the "natural course" of adjustment to this major life event. Most children of the parents in both conditions were in remission 12 months postdiagnosis. Psychological distress of these parents went down substantially, although it was still present to some degree, since 41% of the parents showed distress on a clinically elevated level at that time. Under the condition of change over time for all parents, it is difficult to find an additional effect of an intervention.

Another reason for the absence of an effect may have been that the aim of the intervention was to help parents cope with their immediate distress and give them tools to cope with future potentially stressful aspects resulting from the diagnosis and the treatment of their child. Not enough attention may have been given to the process of changing demands during treatment. These changing demands require continual readjustment. A more flexible intervention, addressing the more immediate needs and worries parents encounter during the treatment of their child's illness, might be more appropriate.

The intervention may also have been too general and may not have addressed the specific problems of these parents. Intervention themes in this study were chosen on the basis of the literature and on clinical experience. There may be other factors that are more relevant and that can hinder a parent in the process of successful adaptation. It is important to investigate those risk factors.

The amount of intervention time (16 hours) spent with the parents may have been insufficient, and the time between sessions may have been too long (3-week interval), leading to too little continuity to produce between-group differences. Additionally, an intervention, begun after diagnosis, early in the treatment phase, may be premature. Edgar, Rosberger, and Nowlis (1992) found that at eight months follow-up adult patients receiving an intervention with 4 months' delay scored significantly
lower on depression, anxiety, and worry and felt more in control, than patients receiving the same intervention immediately following the diagnosis.

Furthermore, the standardized questionnaires tap psychological distress and social support at a rather global level. These generic questionnaires may be insensitive to or inappropriate for the more specific problems parents experience in this situation. Disease-specific questionnaires may yield more insight. Additionally, there may have been a reactive/therapeutic effect, caused from the answering of the questionnaires. Many parents, in both conditions, stated that, as a couple, they had discussed a number of subjects after completion, which they might not have tackled otherwise.

The finding of no effect, as demonstrated with the standardized questionnaires, differed from the clinical evaluation of the efficacy of this intervention program (Heuvel, Hoekstra-Weebers, Kamps, & Klip, 1994). All parents who completed the intervention assessed it positively and evaluated the sessions as supportive and meaningful.

Refusal to participate and drop-out resulted in a small and potentially biased sample. An inherent limitation of a randomization procedure is that those willing to participate in the study may have been parents who were motivated for an additional intervention. Sixty-one percent of the refusing parents and 30% of the drop-outs commented that they did not expect to benefit from an intervention and could cope well on their own. So self-selection took place. Also, the fact that most participants were married/cohabiting suggests some selection bias. However, most nonparticipants (94%) were also married, as were those who dropped out of the study (97%). An explanation for this high percentage of married parents may reflect the fact that the population in the northern part of the Netherlands tends to follow traditional life patterns.

In conclusion, it appeared that a number of parents of pediatric cancer patients, whether they were in the control condition or in the intervention condition, coped well with the stressful event of their child’s cancer as time went on. Standard care, offered by the pediatric oncology team, may have been sufficient to meet the psychological needs of the parents. However, 41% of the parents reported ongoing psychological distress at a clinically elevated level. This at-risk group might benefit from an intervention. Too little is known about which parents face continuing psychological malfunctioning. If they could be identified shortly after diagnosis, they might well benefit from a tailored intervention based on risk factors.

Acknowledgments
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