
Comparison of Brief Group Therapies for Depressed Cancer Patients Receiving Radiation Treatment

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Synopsis

Although many studies have documented patterns of emotional distress in persons undergoing radiation treatment for cancer, there have been few controlled evaluations of counseling or psychotherapy outcomes with these persons. In this research, the effects of cognitive-behavioral and socially supportive group

therapy were evaluated. A total of 72 depressed cancer patients were randomly assigned to one of three conditions—cognitive-behavioral treatment, social support, or a no-treatment control condition.

Before and after intervention and at 6-month followup, study participants were individually assessed by using measures of symptom distress. Relative to the comparison group, both the cognitive-behavioral and social support therapies resulted in less depression, hostility, and somatization. The social support intervention also resulted in fewer psychiatric symptoms and reduced maladaptive interpersonal sensitivity and anxiety.

It was concluded that both group therapies can reduce symptoms of distress for depressed persons undergoing radiation treatment for cancer. Both forms of therapy resulted in improvements in psychosocial function (compared with no treatment at all), but social support groups demonstrated more changes that were evident at 6-month followup. Further research is needed to evaluate the differential effectiveness of mental health services provided to cancer patients undergoing radiation.

AT LEAST 350,000 PEOPLE receive radiation therapy each year. High levels of anticipatory anxiety are common prior to and during such treatment. If interventions to reduce distress are not conducted, patients may experience heightened posttreatment anxiety and depression that can last for many months, particularly if medical symptoms persist (1). Some studies have noted the effectiveness of group psychotherapy for cancer patients in reducing pain (2). At the same time, less intensive psychosocial remedies, such as socialization, have been shown to provide a feeling of belonging (3) and are associated with survival (4).

Psychosocial intervention is often necessary for cancer patients because (5) "... in threatening situations, the level of fear can potentially determine the adequacy of adaptation." Which interventions offer optimal benefits for a majority of patients is unknown, however, and the extent and significance of the clinical benefits of psychosocial treatments for

radiation patients are uncertain.

Evidence concerning the severity of emotional distress after the diagnosis of cancer has been mixed, although data suggest that psychological interventions may be important for reducing emotional distress, enhancing coping, and improving adjustment (6). After learning of the cancer diagnosis, elevated anxiety, depression, social isolation, and suicidal ideation often occur (7). Conversely, other studies have reported only transient distress immediately after diagnosis (5). Discrepant findings may be due to the fact that emotional response to cancer is a function of many factors (8). Determinants of reaction to cancer and any subsequent treatments may include such things as health status, health outlook, expected success of medical care, knowledge of the disease, social support, and coping style (9).

Studies of control and morale have shown a positive relationship between indexes of well-being and a

sense of internal control, as opposed to the belief that things are determined externally by others or by luck (10). Perceived locus of control is a critical issue for persons with uncertain prognosis. If patients feel they still have responsibility in the problem-solving process, they are less likely to be hospitalized (11).

Some studies have demonstrated positive psychosocial effects of group therapy in cancer patients, including improvements in mood, adjustment, and pain (2,9,12). Forester and colleagues (13) postulated that patient mood during radiation therapy may be improved with increased emotional support, demonstrating that group psychotherapy can improve quality of life (14).

Most of these studies have not controlled for the type and extent of cancer, however, and few have evaluated patients before and after radiotherapy. The radiation itself is associated with marked degrees of apprehension, depression, and social withdrawal (15). Differential effects of the specific types of group therapy have not been compared previously, either. The present research adds to prior studies by evaluating the effectiveness of two types of group therapy (cognitive-behavioral and supportive group therapy) and by comparing their outcomes with a no-therapy control condition.

Cognitive-behavioral interventions and social support groups are two of the most widely used approaches to assist persons in dealing with health-related stressors. Cognitive-behavioral intervention assists people in (a) gaining the skills needed to manage and reduce stress, (b) altering cognitions that exacerbate depression, and (c) developing adaptive behavioral coping strategies (16,17).

In contrast, social support groups are less structured, not as intensive in their purpose, and encourage ventilation of feelings, sharing of experiences, and use of the group to obtain peer support and emotional encouragement from others undergoing similar difficulties (2). Therapies that emphasize cognitive and behavioral changes have been shown to enhance the quality of life for cancer patients undergoing radiotherapy by reducing emotional and physical distress (14).

Other studies show that social support alone may be an important factor in survival and emphasize the importance of the group in providing a feeling of belonging and a means of expressing feelings (7). Because of the differential effects of these distinct types of psychosocial interventions, and the subsequent interpretation of why they are effective, our study compares the two treatments in a single trial that measures important psychosocial outcome variables.

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Method

Subjects. Potential participants in the study were 95 stage II cancer patients scheduled to undergo external radiation treatment at a large university affiliated hospital. They completed preintervention assessments, and 78 persons who had initial Center for Epidemiological Studies Depression Scale (CES-D) scores of 16 or more (the cutoff indicating probable depression) entered the study (18). Twenty-nine of these participants were randomly assigned to the cognitive-behavioral treatment group, 23 to the social support group, and 26 to the comparison condition (six did not participate in followup because of death or illness). Because we recruited the sample by screening for depressed patients from the entire list of patients scheduled for treatment, the sample corresponds with, and represents, the population. There were no significant differences among groups in estimated 5-year survival that ranged from 0 to 80 percent (mean 63 percent).

Measures. At entry, at 8 weeks, and at 6-month followup, each participant completed four measures administered in a single session. The CES-D is a 20-item scale, scored from zero (no depression) to 3 (definite signs), developed to measure depressive symptoms in the general population and clinical samples. The scale correlates well with other clinical measures for depression and has been extensively tested and validated (19). Respondents indicate the frequency of depressive symptoms using a 4-point scale. Scores on the CES-D range from 0 to 60, with higher scores reflecting greater depression.

The Social Provisions Scale (20) is a 24-item Likert-type scale that assesses perceived social support along six dimensions: social attachment, social integration, reassurance of worth, reliable alliance with others, guidance, and nurturance of others. The validity and reliability of the Social Provisions Scale is supported by studies that also

Table 1. Mean scores on measures of emotional distress of depressed cancer patients in cognitive-behavioral therapy (N = 27), social support (N = 21), and control groups (N = 24)

Scale	Pretreatment						Posttreatment						Followup						P ¹
	Cognitive		Support		Control		Cognitive		Support		Control		Cognitive		Support		Control		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
CES-D	27.2	8.8	27.9	8.4	29.0	7.0	20.9	11.7	18.8	7.4	26.8	9.5	24.1	11.3	19.9	14.8	24.9	7.7	<.05
SCL-90-R:																			
Global	1.0	0.5	1.3	0.6	1.5	0.6	1.0	0.5	20.8	0.5	1.3	0.5	1.3	0.5	20.8	0.6	0.8	0.5	<.05
Depression	1.8	0.5	1.4	0.7	1.3	0.7	21.2	1.0	21.1	0.6	1.8	0.8	1.6	0.8	21.1	0.8	1.5	0.6	<.05
Somatization	1.1	0.7	1.1	0.7	1.2	0.6	21.0	0.8	20.8	0.6	1.2	0.7	1.0	0.7	20.5	0.5	1.2	0.6	<.05
Hostility	1.0	0.9	0.8	0.5	1.2	0.8	20.8	0.7	20.5	0.4	1.2	0.8	0.9	0.6	0.6	0.8	1.1	0.8	ns
Phobia	0.6	0.6	0.9	0.8	0.7	0.7	0.5	0.6	0.5	0.5	0.8	0.7	0.5	0.8	0.7	0.7	0.6	0.6	ns
Anxiety	1.0	0.6	1.3	0.8	1.3	0.8	1.0	0.7	20.7	0.5	1.4	0.9	1.1	0.7	20.9	0.8	1.2	0.8	<.05
Locus of control:																			
Internal	45.2	7.2	46.7	5.0	43.3	7.0	43.4	7.0	45.3	7.1	41.9	6.4	43.5	8.4	46.3	5.6	40.9	7.8	ns
External	35.7	8.1	35.5	6.4	37.8	8.3	33.8	7.8	36.4	8.7	37.1	7.6	34.1	8.1	37.4	6.4	37.2	6.7	ns
Luck	36.6	10.3	34.6	8.8	36.2	5.0	36.1	9.0	33.1	9.1	34.9	7.1	36.9	11.2	34.5	5.4	34.9	7.8	ns
Social support	68.2	9.2	70.2	9.2	69.4	7.3	69.1	9.8	71.0	7.1	67.7	8.8	69.8	8.1	72.7	7.0	68.9	8.8	ns

¹ANCOVA.

²Differ from comparison groups at the 0.05 level per Scheffe's post hoc test (pooled mean squares).

NOTE: SD = Standard deviation; ns = not significant.

demonstrate the scale's predictive relationships to depression and coping with stress (21).

The SCL-90-R (22) has been used extensively to assess psychiatric distress. Scores for the SCL-90-R are reported in table 1 to include global severity, depression, somatization, hostility, phobia, and anxiety. Subscales yield scores between 0.0 and 4.0 and have high concurrent and discriminant validity. Measures of factor internal consistency range from 0.77 to 0.90.

The Multidimensional Health Locus of Control Scale (MHLC) (23) is widely used in health behavior research to assess beliefs about health influences. The MHLC provides a specific breakdown of determinants of reinforcement sources for health-related behaviors. Its three independent scales include internality, "powerful other" externality, and chance externality. This measure has 18 items representing statements regarding personal beliefs about health. The participant is asked to respond by marking a six-point scale ranging from strongly agree to strongly disagree. Scores for each subscale range from 6 to 36. The internal consistency reliability using Cronbach's alpha ranges from 0.67 to 0.77 for all six scales. The scales also correlate with participants' states of health.

Design. Participants were randomly assigned to one of three intervention conditions—an 8-week cognitive-behavioral group, an 8-week social support group, or a no-treatment comparison condition. Group sessions lasted 1 hour per week and had six to nine participants. There were three groups in each condition over the course of the study. The group

leader in each condition was a social worker experienced in the respective intervention approach. Both leaders were of similar age (early 40s) and each had more than 10 years of group counseling experience.

Intervention and control conditions. The cognitive-behavioral groups focused on the use of cognitive and behavioral strategies to reduce maladaptive anxiety and depression. Each session had a skill training theme, and the sessions involved teaching participants coping skills, group discussion of potential uses and benefits of the skills, and weekly review of success in implementation. Skill areas included modification of cognitions that exacerbate anxiety or depression, progressive muscle relaxation, and establishment of a network of supportive relationships. The questions, concerns, and problems of participants in implementation of change were handled from a problem-solving perspective. Sessions also included at-home practice assignments.

Cognitive-behavioral therapy is based on the premise that the process of acquiring knowledge and forming beliefs is a key cause of prevailing mood and behavior (24). Treatment may improve mood or change behavior by focusing on thought processes that influence attitude toward events. Negative ways of viewing situations are thought to confound problems, erode self-esteem, and lead to depressive mood. Habitual thought processes are not often subjected to systematic logical analysis, and they can occur without awareness. Careful questioning can sometimes help retrieve feelings related to negative thinking. Rigid negative thinking, in which events are

either devalued or extenuated, is typical of lonely or depressed persons and is a target for change by cognitive-behavioral therapists.

The social support group condition was modeled after the type of support groups commonly used in coping with other types of chronic illness (25). The leader of the support groups encouraged members to describe their feelings about having cancer, to identify shared problems, to discuss how these issues are handled, and to adopt supportive roles toward others in the group. The group members generated the discussion topics of each session. Members often chose to talk about how it felt to have the group sessions as a place to share their concerns.

Participants assigned to the control condition completed assessment measures at the same time as participants in the other conditions, but they did not attend intervention groups. Given ethical obligations to participants, however, persons assigned to the control condition were offered crisis intervention and individual therapy at no charge (upon request) outside the study protocol. Only two persons availed themselves of this offer by contacting the community crisis clinic for single consultations, which did not likely bias the study results.

Table 2 shows the demographic characteristics of subjects in the three conditions. Similarities in characteristics among the groups reflects that the randomization process was effective. As in any group treatment setting, there was potential for "waiting room bias," or the phenomena of subjects collaborating prior to, or after, the treatment protocol. To offset this potential bias, participants were given room assignments directly and the milieu had no waiting room.

Results

The mean duration of the participants' knowledge of their diagnosis was 12.3 weeks. The groups did not differ significantly in age, education, or number of months since diagnosis. Forty-eight members of the intervention group completed the intervention and followup assessment. At 6 months, data were obtained from 72 participants (27 in the cognitive behavioral group, 21 in the social support group, and 24 in the comparison group). Two participants died, and four became too ill to complete the followup measures. Only the participants for whom all data were collected, including followup data, were included in the analysis. Our results therefore underrepresent the patients who were most seriously ill. The attrition rate of 8 percent was evenly distributed among the groups.

Table 2. Demographic and group characteristics of 72 depressed cancer patients¹ studied in three conditions by number, percent, or mean

Characteristics	Cognitive-behavioral (N = 27)	Social support (N = 21)	Control group (N = 24)
Type of cancer:			
Lung.....	11	9	10
Bladder.....	9	6	7
Prostate.....	6	5	5
Head-neck.....	1	1	2
Sex:			
Male.....	17	14	16
Race:			
White.....	16	14	13
African American.....	3	2	3
Other.....	8	5	8
5-year survival (percent) ..	64	62	62
Sessions (mean number) ..	7.6	7.8	...
Mean age (years).....	54.2	53.7	53.8
Mean years of school.....	11.2	11.1	10.9

¹Six patients did not participate in followup because of death or illness.

Effects of intervention on measures of distress after treatment. A repeated measures MANCOVA was performed on the dependent variables. The independent variables were treatment condition and time. Employing Wilks's criterion, the combined dependent variables were significantly affected by the interaction of treatment condition and time ($F = 3.32$, $df 24, 58$, $P < .001$). There was also a significant multivariate effect for time ($F = 3.23$, $df 12, 28$, $P < .01$). There was not a significant effect for treatment condition. These results indicate that treatment conditions differed significantly in degree of dependent variable changes from pretreatment to post-treatment.

To control for pre-intervention differences, all data were analyzed with analyses of covariance (ANCOVA), using preintervention scores as covariates. The analyses examined differences between participants in the three conditions at both the postintervention point and at the 3-month followup, compared to their initial scores. When there was a significant difference across conditions, planned comparisons tested which groups differed significantly from one another at the $\alpha = 0.05$ level. Groups were not significantly different on pretreatment scores which suggests that randomization was effective.

Table 1 presents results of the ANCOVA for the measures of emotional distress. Participants who received either the cognitive-behavioral or social support group interventions had significantly lower scores on the depression scale after intervention than did comparison group members ($F = 4.15$, $df 2, 67$, $P < .01$). Similar effects were found on the anxiety

scale, with both intervention groups showing less anxiety after intervention than comparison group members ($F = 5.49$, $df = 2, 67$, $P < .01$). Similar results were found for differences on the somatization scale, and treatment group members had lower levels of maladaptive somatic preoccupation than comparison group members at postintervention ($F = 5.54$, $df = 2, 67$, $P < .01$).

Followup. At 6-month followup, only social support group participants continued to differ significantly from comparison subjects in somatization ($F = 4.23$, $df = 2, 64$, $P < .01$) and depression ($F = 4.09$, $df = 2, 67$, $P < .01$). Social support group participants differed from comparison group members in overall distress symptoms (SCL-90-R global severity) at postintervention ($F = 4.13$, $df = 2, 62$, $P < .01$). This pattern of lower severity in psychiatric symptoms remained statistically significant for social support group members at followup ($F = 3.2$, $df = 2, 59$, $P < .05$). Also, social support group subjects scored significantly lower on the anxiety scale than comparison group participants at followup ($F = 3.2$, $df = 2, 64$, $P < .05$). Cell counts for the effects of intervention by type of cancer were too small to analyze statistically.

Discussion

Depressed persons with cancer who received brief group therapy interventions exhibited greater reduction in emotional distress than members of a comparison group who did not participate in any group intervention. Although both cognitive-behavioral and social support group interventions produced reductions in depression, anxiety, and somatization, the social support intervention also resulted in reduction in overall post-intervention psychiatric symptoms, as well as significantly less somatic preoccupation, anxiety, and depression at followup.

Recent studies concur that psychological interventions can reduce distress in cancer patients receiving radiotherapy (6). The differential benefits or detriments of the various psychosocial interventions, however, have not been addressed. Our study presents a methodology for comparing two common psychosocial treatment protocols and documents empirical findings that suggest there may be important differences in their effectiveness and pattern of outcomes, even though they were similar in duration, leadership, scheduling, and purpose.

Although both study interventions reduced distress, the social support group therapy condition produced favorable change on more dimensions of adjustment

for more participants. This suggests that support groups may be somewhat more beneficial, although the effect size is small. One reason may be that social support groups do not require structured learning activities, which may be inherently distress-producing and cause iatrogenic problems. The lower demands of social support may have been responsible for the observed lower distress levels. Thus our findings support the assertion by Forester and others (14) that the mechanism by which group therapy is effective may be the opportunity to discuss shared concerns, and the observed reduction in emotional distress may facilitate such process. Although groups in both conditions showed diminishing signs of anxiety, the support group's anxiety was significantly less, and it was more effective than cognitive therapy in reducing other psychiatric symptoms. Its unique pattern of effectiveness and potential benefits warrant further scrutiny.

In addition to the prospect of debilitating illness and early death, participants in both groups often expressed frustration and anger over abandonment by family because of the stigma of cancer. Opportunities in support groups to discuss concerns with others who faced similar challenges may have helped participants develop coping skills and reduced psychiatric symptoms. Similar findings have been found in other support group therapy interventions, but the results are often reported only in the context of transient benefits (7). Our findings showed sustained effects over several months in some areas of emotional coping.

This study has several limitations. The design focused on therapy outcomes rather than processes. It would be helpful for future research to employ process analyses as well. Our results suggest that social support group process mechanisms may predict reductions in anxiety and somatic symptoms. We were not able to link participants' preintervention depression levels definitively as a response to their disease condition. Depressed persons with cancer may have been depressed before their diagnosis.

It is also possible that our study did not include enough people to detect a difference among groups on some variables. That is, the statistical power of the study may not have been sufficient to detect clinical differences on the outcomes measured (26). The fact that both interventions significantly reduced emotional distress in the short term is encouraging, but future studies should use larger sample sizes to ascertain potentially unique and longer term benefits of supportive intervention. Also, therapists were used who had individual expertise in the respective interventions, and we have no way of determining to

what extent the groups were responding to their ideologies and personalities rather than to the intervention mode.

Participants seeking to enter our study had been aware of their diagnosis, on average, for more than 3 months. Recent findings that severe depression in persons with terminal illness is predicted by a shorter length of time that the condition has been known may indicate that personal distress and need for mental health assistance are higher when symptoms of illness appear, that is, when a healthy, recently asymptomatic person initially learns of their disease. Although this does not reduce the importance of mental health interventions for other chronically ill people, it highlights the need to study the natural history of mental health processes in persons with cancer beginning at or near the time of diagnosis.

Some indicators of distress did not show maintained improvement regardless of intervention type. No improvement might be expected when employing a brief intervention for people who are faced with a worsening health condition. Although variables such as locus of control and social support are known to correlate with health care utilization and outcome, they are difficult to change or manipulate.

In summary, we tested brief group therapy models because they can be offered most feasibly. The brief group therapies selected were beneficial, although supportive therapy had more lasting effects on affective symptomatology. Future research might focus on the effects of longer term interventions, particularly social support models. Socially supportive counseling in this study was associated with successful coping, suggesting that such nonintensive interventions are at least as effective as cognitive behavioral models, and likely more so, in reducing day-to-day distress for patients receiving radiation treatment.

References

1. Spiegel, D., and Glafkides, M.: Effects of group confrontations with death and dying. *Int J Group Psychother* 22: 2433-2474 (1983).
2. Spiegel, D., and Bloom, J. R.: Group therapy and hypnosis reduce metastatic carcinoma pain. *Psychosom Med* 45: 333-339 (1983).
3. Rodin, J.: *Managing the stress of aging: coping and health*. No. 171. Plenum Press, London, 1980.
4. Spiegel, D., Bloom, J. R., Kraemer, H. C., and Gottheil, E.: Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *Lancet* No. 8668: 888-891, Oct. 14, 1989.
5. Andersen, B. L., and Tewfik, H.: Psychological reactions to radiation therapy: reconsideration of the adaptive aspects of anxiety. *J Pers Soc Psychol* 48: 1024-1032 (1985).
6. Andersen, B. L.: Psychological interventions for cancer patients to enhance the quality of life. *J Cons Clin Psychol* 60: 552-568 (1992).
7. Kennedy, S., Kjecolt-Glaser, J. K., and Glaser, A.: Immunological consequences of acute and chronic stress: mediating roles of interpersonal relationships. *Br J Educ Psychol* 61: 177-182 (1988).
8. Ferlic, M., Goldman, A., and Keedy, B. J.: Group counseling in adult patients with advanced cancer. *Cancer* 43: 760-763 (1979).
9. Gustafson, J., and Whitman, H.: Toward a balanced social environment on the oncology service. *Soc Psychiatr* 19: 555-558 (1978).
10. Blazyk, S., and Canavan, M. M.: Therapeutic aspects of discharge planning. *Soc Work* 30: 489-496 (1985).
11. Lockery, S. A., et al.: Factors contributing to the early rehospitalization of elderly people. *Health Soc Work* 19: 182-191 (1994).
12. Wood, P., Milligan, I., Christ, D. and Liff D.: Group counseling for cancer patients in a community hospital. *Psychosomatics* 19: 555-557 (1994).
13. Forester, B. M., Kornfeld, D. S., and Fleiss, J.: Psychiatric aspects of radiotherapy. *Am J Psychiatr* 135: 960-963 (1978).
14. Forester, B., Kornfeld, D. S., Fleiss, J. L., and Thompson, S.: Group psychotherapy during radiotherapy: effects on emotional and physical distress. *Am J Psychiatr* 11: 1700-1706 (1993).
15. Forester, B., Kornfeld, D. S., and Fleiss, J. L.: Psychotherapy during radiotherapy: effects on emotional and physical distress. *Am J Psychiatr* 142: 22-27 (1985).
16. Folkman, S., et al.: Translating coping theory into an intervention. *In* *The social context of stress*, edited by I. Eckenrode. Plenum Press, New York, 1991, pp. 141-152.
17. Fishman, B., and Loscalzo, M.: Cognitive-behavior interventions in management of cancer pain: principles and applications. *Med Clin North Am* 71: 271-287 (1987).
18. Radloff, L. S.: The CES-D Scale: a new self-report depression scale for research in the general population. *Appl Psychol Measurement* 1: 385-401 (1977).
19. Radloff, L. S., and Locke, B. Z.: The Community Mental Health Assessment Survey and CES-D Scale. *In* *Community surveys of psychiatric disorders*, edited by M. M. Weissman et al. Rutgers University Press, New Brunswick, NJ, 1986, pp. 83-95.
20. Cutrona, C. E., and Russell, D. W.: The provisions of social relationships and adaptation to stress. *Adv Pers Relationships* 1: 37-67 (1987).
21. Cutrona, C. E.: Ratings of social support by adolescents and adult informants: degree of correspondence and prediction of depression symptoms. *J Pers Soc Psychol* 57: 723-730 (1989).
22. Derogatis, L. R.: *The SCL-90-R. Clinical Psychometrics Research Unit*, Johns Hopkins University, Baltimore, MD, 1975.
23. Wallston, K. A., Wallston, B. A., and Devellis, R.: Development of the multidimensional Health Locus of Control scales. *Health Educ Monogr* 6: 160-170 (1978).
24. Meichenbaum, D.: *Cognitive-Behavior modification: all integrative approach*. Plenum Press, New York, 1977.
25. Yalom, I. D., and Greaves, C.: Group therapy with the terminally ill. *Am J Psychiatr* 134: 396-400 (1977).
26. Kazdin, A. E., and Bass, D.: Power to detect differences between alternative treatments in comparative psychotherapy outcome research. *J Cons Clin Psychol* 57: 138-147 (1989).