

Group and Individual Treatment Strategies for Distress in Cancer Patients

MATTHEW M. CLARK, PhD; J. MICHAEL BOSTWICK, MD; AND TERESA A. RUMMANS, MD

Many cancer patients experience distress during the course of their illness. Recently, the National Comprehensive Cancer Network recommended that all cancer patients receive evaluation and treatment of distress as a routine part of their care. For some patients, psychosocial interventions may be helpful, but which patients benefit from what type of psychosocial interventions is unclear. To highlight the importance of this problem, this article examines the prevalence of distress in cancer patients and reviews the evidence that supports that cancer patients benefit from group and individual treatment strategies.

Several randomized studies have examined the effects of group or individual therapy on both the emotional and the physiological well-being of cancer patients. Both individual and group interventions that are structured have proved effective in reducing distress. Clearly, more investigation is warranted and future research is needed to advance the understanding of structured interventions, to examine support groups, and to tailor psychological interventions to meet individual needs of distressed cancer patients.

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Distress has been identified as “an unpleasant experience of an emotional, psychological, social, or spiritual nature that interferes with the ability to cope with cancer treatment.”¹ Although an estimated 35% of cancer patients will experience distress,² less than one third of these distressed cancer patients will be referred for mental health treatment.¹ Several studies have specifically analyzed the prevalence of both clinical and subclinical distress in cancer patients. Of 160 women with stage I or II breast cancer who participated in a structured diagnostic clinical interview, 5% had symptoms of posttraumatic stress disorder, and 11% reported major depressive symptoms.³ Similarly, Whelan et al⁴ found a high rate of psychosocial symptoms in 134 patients newly diagnosed with breast, colorectal, head and neck, lung, prostate, or nonmelanoma skin cancer. Of these patients, 66% reported fatigue; 61%, pessimism or anxiety; 48%, insomnia; 42%, inadequately controlled pain; and 33%, significant distress. To cope with these difficulties, patients believed that help with informational needs (85%), social concerns (66%), and activities of daily living (41%) would be beneficial. In a study of 1109 patients with cancer at various stages and sites, 21.5% had mild depression, 12.5% had moderate depression, and 2% experienced severe depression.⁵ Clearly, the prevalence of anxiety, depression, and distress is high in cancer populations.

In distinguishing a psychiatric disorder from psychosocial distress, it should be noted that distress exists along a temporal continuum. Feelings range from being transiently upset, worried, or fearful to persistent anxiety that requires clinical intervention. Likewise, depressive symptoms can range from fleeting mild dysphoric feelings to melancholic depression. Spiritual distress also exists along a spectrum, from reflections on the purpose and meaning of life, to questions about spiritual beliefs, to experiencing a spiritual crisis. Recognizing distress in cancer patients and offering intervention can improve functioning and quality of life (QOL).⁶ This article focuses on interventions that have been shown empirically to reduce distress in cancer patients.

EFFECTIVENESS OF SUPPORTIVE, STRUCTURED GROUP INTERVENTIONS

In a landmark 1981 study, Spiegel et al⁷ reported the effects of a supportive group intervention on various QOL factors for 58 women with metastatic breast cancer who completed the year-long intervention. These women had been randomly assigned to either routine clinical care (n=24) or routine oncologic care plus a weekly psychosocial intervention (n=34). The group met weekly for 90 minutes for 2 years. The group design had 2 elements: a supportive component (eg, building group camaraderie by sharing fears and concerns) and a structured intervention that focused on teaching strategies to improve QOL (eg, strategies to improve physician-patient communication and hypnosis to help manage pain and anxiety). The groups focused on issues central to metastatic breast cancer, grieving losses, and encouragement of support.⁸ At the conclusion of the year-long study, the patients who had par-

From the Department of Psychiatry and Psychology, Mayo Clinic, Rochester, Minn.

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Individual reprints of this article are not available. Address correspondence to Matthew M. Clark, PhD, Department of Psychiatry and Psychology, Mayo Clinic, 200 First St SW, Rochester, MN 55905 (e-mail: clark.matthew@mayo.edu).

ticipated in the weekly support group reported less tension and anxiety, less fatigue, less confusion, and more vigor compared with those assigned to routine clinical care.

In a follow-up study,⁹ the investigators examined the effect of the group intervention on survival rates in all patients who enrolled in the study. The mean duration of survival was only 18.9 months for the 36 women in the routine clinical care arm vs 36.6 months for the 50 women in the support group arm. This dramatic and widely reported difference in survival rates was instrumental in the development of other group intervention protocols to reduce distress in cancer patients. Of the physiologic mechanisms involved, enhanced immune functioning has been proposed. The results of a pilot study of 34 women being treated for stage I or stage II breast cancer suggested that participation in a 10-week cognitive-behavioral stress management group intervention may reduce serum cortisol levels.¹⁰ Although the Spiegel intervention improved mortality rates, a finding that has not been replicated consistently, we believe that an increase in survival should not be the primary goal of psychosocial interventions. Rather, improving QOL by decreasing distress and enhancing the coping strategies of cancer patients should be the primary aim of psychosocial interventions. The effects of psychotherapy on cancer survival have been reviewed recently.⁸

Several investigators have tried to extend the findings of Spiegel et al (Table 1). In a study of 125 women with metastatic breast cancer randomized to either 1 year of weekly supportive-expressive group therapy or to a control arm without group therapy, Classen et al²² were unable to replicate the improvement in general mood observed in group therapy participants in the 1981 study; however, their patients showed a significantly greater reduction in traumatic stress symptoms. The authors propose that their inability to replicate mood improvement could be the result of controls having greater access to outside support groups compared with controls in the early 1980s. A similar 1998 study supports this premise in that 63% of controls reported using audiotapes for relaxation, 50% were exercising, 19% participated in psychotherapy, and 28% attended a support group.¹⁸ Because of a substantial amount of information available on complementary care, many cancer patients may receive psychosocial interventions in their communities.

A larger multicenter trial, specifically designed to replicate Spiegel's results on survival, mood, and pain, found that participation in weekly 90-minute supportive-expressive group therapy for 1 year did not prolong survival.²³ However, in this study published in 2001 involving 235 women with metastatic breast cancer, a subgroup of women with high levels of baseline distress or pain ben-

efited from participation in group therapy, as shown by improved mood and decreased pain level. Thus, researchers have been able to replicate mood improvements but not survival improvements noted in the studies by Spiegel et al.

BRIEF STRUCTURED INTERVENTIONS

Concurrent with the groundbreaking work of Spiegel et al, other psycho-oncology groups have developed structured psychosocial interventions to reduce the psychosocial morbidity associated with cancer. Harvard Medical School researchers created Project Omega, a structured intervention to reduce distress in cancer patients.²⁴ In the initial validation study, 117 cancer patients were randomly assigned either to participate in the intervention or to receive standard oncologic care. The Project Omega participants met 4 times during a 6-week period. A set of 10 cards, each illustrating a scenario commonly encountered by cancer patients, was used in each session to lead the discussions that focused on solving problems raised by the troublesome situation on the card. Topics included loneliness and isolation, morale and self-management, sexuality and contact, body self-esteem and general mood, communication, body self-image and social adjustment, existential plight, social alienation and self-identity, emotionality and personal control, and dysphoria and depression. After 6 weeks, the communication and coping skills of the participants in the intervention group improved relative to those of the controls. Unfortunately, the researchers did not explore whether these improvements were sustained long term.

In a follow-up study, Telch and Telch¹³ used Project Omega strategies to investigate the potential benefit of group instruction in coping skills. Forty-one cancer patients with a Karnofsky performance score greater than 70 were randomly assigned to participate in structured group instruction in coping skills, unstructured support group therapy, or a control group that consisted of routine clinical care. The 2 experimental groups met for 90 minutes per week during a 6-week period. Like Project Omega, the structured coping skills intervention included exercises in goal setting, self-monitoring, role playing, coaching, relaxation training, assertion training, problem solving, feelings management, and pleasant activity planning. Unstructured support group sessions centered on discussing feelings, concerns, and problems; acting as a facilitator only, the group leader offered no set structure or agenda. At the end of the 6-week intervention, participants in the coping skills instruction group reported less distress, less tension, less depression, less anger, less fatigue, less confusion, and more vigor, as measured by their Profile of Mood States. In contrast, unstructured support group members showed little, if any, improvement in psychosocial functioning. Those in the control group had a reduction in psychosocial

Table 1. Summary of Published Studies of Psychosocial Interventions and Impact on Mood in Cancer Patients

Reference	No. of patients	Type of cancer or treatment	Intervention	Results*
Spiegel et al, ⁷ 1981	58 F	Metastatic breast cancer	Weekly 90-min sessions of supportive-expressive group therapy for 1 y	Improvement in mood (POMS)
Linn et al, ¹¹ 1982	120 M	End-stage cancer of lung, colon, stomach, pancreas	Individual counseling	Improvement in quality of life
Cain et al, ¹² 1986	72 F	Gynecologic cancer	8 Structured individual or group psychotherapy sessions	Diminished depression and anxiety (Hamilton scales) and greater adjustment to illness (PAIS)
Telch & Telch, ¹³ 1986	27 F, 14 M	Breast cancer, Hodgkin lymphoma, lung cancer	Weekly 90-min sessions of either structured group instruction or unstructured group therapy for 6 wk	Structured group had improvement in mood (POMS)
Fawzy et al, ¹⁴ 1990	35 F, 33 M	Stage I or II malignant melanoma	Weekly 90-min sessions of structured group intervention for 6 wk	Improvement in mood (POMS)
Greer et al, ¹⁵ 1992	156 (primarily female)	Various cancers	6 Structured 60-min individual psychotherapy sessions	Less anxiety, less depression (HADS), and improved fighting spirit
Forester et al, ¹⁶ 1993	21 F, 27 M	Radiotherapy	Weekly 90-min sessions of structured educational group therapy for 10 wk	Improvement in mood (SADS) and less physical symptoms
Ilnyckyj et al, ¹⁷ 1994	90 F, 36 M	Stage I-IV breast, lymphoma, colon, ovarian, other cancer	Weekly 60-min sessions of professional group or peer group support for 6 mo	No improvement
Cunningham et al, ¹⁸ 1998	66 F	Metastatic breast cancer	Weekly 120-min sessions of structured group therapy for 35 wk	No improvement in mood (POMS)
Edelman et al, ¹⁹ 1999	92 F	Metastatic breast cancer	Weekly 120-min sessions of structured group therapy for 8 wk	Improvement in mood (POMS) after treatment, but not at 3- or 6-mo follow-up
Helgeson et al, ²⁰ 1999	312 F	Stage I, II, or III breast cancer	Weekly 45- to 105-min sessions of structured educational intervention or peer-led discussion for 8 wk	Educational intervention improved self-esteem and body image and reduced disturbing thoughts
Helgeson et al, ²¹ 2000	312 F	Stage I, II, or III breast cancer	Weekly 45- to 105-min sessions of educational intervention or peer-led discussion for 8 wk	Educational intervention most beneficial, but for those who lacked support, peer groups were helpful
Cruss et al, ¹⁰ 2000	34 F	Stage I or II breast cancer	Weekly 120-min sessions of structured group intervention for 10 wk	No improvement in mood (POMS)
Antoni et al, ² 2001	100 F	Stage 0-II breast cancer	Weekly 120-min sessions of structured group intervention for 10 wk	No general improvement in mood (POMS), but symptoms in those with moderate depression (CES-D) decreased
Classen et al, ²² 2001	125 F	Metastatic breast cancer	Weekly 90-min sessions of supportive-expressive group therapy for 1 y	No impact on mood (POMS) but reduction in traumatic stress symptoms
Goodwin et al, ²³ 2001	235 F	Metastatic breast cancer	Weekly 90-min sessions of supportive-expressive group therapy for 1 y	Improvement in mood (POMS) for those with high baseline distress

*CES-D = Center for Epidemiologic Studies-Depression Scale; HADS = Hospital Anxiety and Depression Scale; PAIS = Psychosocial Adjustment to Illness Scale; POMS = Profile of Mood States; SADS = Schedule for Affective Disorders and Schizophrenia.

adjustment. Thus, participation in brief, structured group interventions reduced the emotional distress of cancer patients, whereas participation in an unstructured support group did not reduce distress.

In a similar study, 48 patients who had received radiotherapy were randomly assigned to participate in either a structured educational group therapy or a control group of standard medical care.¹⁶ Patients in the structured group intervention met weekly for 90-minute sessions for 10 weeks. At the conclusion of the trial, group therapy partici-

pants reported fewer emotional symptoms. They had less depression, worry, anxiety, isolation, and hopelessness and less physical symptoms of anorexia, gastrointestinal distress, and fatigue compared with the controls. This trial offers additional support for the effectiveness of brief structured group interventions in reducing distress.

Fawzy et al¹⁴ examined the potential benefits of a structured group intervention for 80 postsurgical patients with stage I or II malignant melanoma. At 6-month follow-up, participants in the 6 weeks of structured weekly 90-minute

group sessions had improved mood and energy level. The structured group intervention combined health education, illness-related problem-solving skills, stress management, and psychological support. After 6 years, the 68 patients with stage I disease in the intervention group had trends for a higher survival rate and lower cancer recurrence rate compared with controls²⁵ (mortality, 10/34 compared with 3/34; recurrence, 13/34 compared with 3/34, respectively). In a recent 10-year follow-up of this cohort,²⁶ the researchers found that, after controlling for sex and Breslow depth, those in the intervention group survived longer, but there were no differences in recurrence. In a similar 10-week structured stress management intervention for 100 women newly treated for breast cancer (stage 0-II), researchers found that participation in the intervention improved mood in those distressed at baseline and improved general optimism about the future.² Given these improvements in psychosocial functioning, these studies support the premise that structured interventions delivered in a group setting benefit cancer patients. However, although the aforementioned studies provide evidence that brief treatments can improve long-term psychosocial functioning of cancer patients, some investigators have found that initial mood improvement from participation in a brief structured group may not be maintained over time (3- and 6-month follow-up).^{19,27} Thus, an important area for future investigation is the identification of time-limited interventions that are effective for long-term management of distress.

PEER-LED SUPPORT GROUPS

Another intervention used to reduce distress in cancer patients is the peer-led support group. Earlier investigation of support groups, in which group leaders were not given specific strategies or techniques, has shown that these types of groups do not appear to improve psychosocial functioning.^{13,17} To clarify this issue, Helgeson et al²⁰ performed a head-to-head comparison of a peer-led group and a structured group intervention. They randomized 312 women with stage I or stage II breast cancer to either 8 weekly sessions of a structured educational intervention or to a peer-led discussion group. The structured educational intervention included relaxation training, an overview of breast cancer, and information on chemotherapy, nutrition, exercise, body image, communication skills, and relationship building. In contrast, facilitators in the peer-led discussion group encouraged participants to express their feelings, confront problems, and think positive thoughts. At the end of treatment, those in the structured educational intervention (but not the peer-led discussion group) experienced improvements in QOL in both mental health and physical health dimensions. At 6-month follow-up, those in the

structured educational intervention continued to report not only improvements in their QOL but also to endorse improved positive affect, reduced negative affect, improved self-esteem, better body image, and less uncertainty about their illness. In contrast, subjects in the peer-led discussion group had improvements in neither physical nor mental QOL. Furthermore, they had decreased vitality and emotional well-being. Thus, the authors concluded that, for most patients with breast cancer, a structured educational intervention is superior to peer-led self-help discussions.

INDIVIDUAL STRUCTURED PSYCHOTHERAPY

For various practical reasons, not all patients are able to participate in group interventions. Job schedules, transportation problems, or conflicting medical appointments, particularly during active cancer treatment, can make group participation inconvenient or impossible. Other patients are too ill with physical symptoms, particularly fatigue or nausea, and illness can interfere with ability to participate. Finally, not all individuals are psychologically suited to tolerate group interventions. Thus, flexibly scheduled individual interventions are necessary. In a study of 156 patients with cancer, excluding cerebral tumors and non-melanoma skin cancers, Greer et al¹⁵ randomized patients to brief structured individual psychotherapy or routine clinical care. The structured individual psychotherapy focused on identifying personal strengths, raising self-esteem, overcoming feelings of helplessness, and promoting a fighting spirit. Additional components included exercises in cognitive restructuring, role-playing, activity planning, relaxation training, and communication skills. Of patients in the treatment group, 80% (vs 59% in the control group) had decreased anxiety, and 87% (vs 71% in the control group) had decreased depression. Moreover, 84% of patients in the treatment group (vs 60% in the control group) maintained or improved their fighting spirit. At 1-year follow-up, patients in the treatment group continued to have lower rates of depression (11% vs 18%) and lower rates of anxiety (19% vs 44%).²⁸ Similar results occurred in 120 men with end-stage cancer, whose participation in individual counseling improved mood, self-esteem, and life satisfaction.¹¹

In a comparison study between structured individual therapy and structured group therapy, individual proved as effective as group. Cain et al¹² randomly assigned 72 patients with newly diagnosed gynecologic cancer with an expected survival of more than 1 year to either 8 structured group sessions or 8 structured individual psychotherapy sessions. The topics covered in both individual and group sessions included the following: what is cancer, what causes cancer, impact of treatment, relaxation training, diet and exercise, relating to caregivers, talking with friends,

and goal-setting strategies. At 6-month follow-up, participants in both the group and the individual interventions reported less depression, less anxiety, and better relationships compared with those receiving standard clinical care. Thus, it appears that a structured intervention delivered either in a group setting or as individual psychotherapy is beneficial.

CONCLUSIONS

The prevalence of distress in cancer patients is an important problem. Several randomized controlled studies have shown that both structured individual and structured group interventions can reduce distress and improve QOL in cancer patients. However, studies to date have not systematically evaluated such potentially important individual factors as level of distress, social support, coping history, and sex. Future studies are needed to identify cost-effective and efficacious patient treatment-matching models, to further examine support-group interventions, and to advance the identification of the treatment components in structured interventions crucial to improving the QOL in cancer patients.

Even though published studies show that psychosocial interventions can meet the needs of some cancer patients, recruitment rates for participation in psychosocial interventions are abysmally low (<20%).^{19,23} Therefore, investigators and practitioners must design and offer practical interventions. Variables such as time of day, location and frequency of intervention, credentials of practitioners, group membership characteristics (tumor type and stage, treatment, sex, etc), and timing of intervention to medical treatment (eg, during chemotherapy or after completion of chemotherapy) need to be considered and investigated.¹⁹ Interventions must be designed that are not only beneficial but also easily accessible, brief, and cost-effective. Comparisons need to be made between brief and long-term interventions, proceeding from the hypothesis that brief interventions could have clinical effectiveness that is equal to more intensive, more costly, and longer-term interventions. With brief interventions, it would be easier for patients to accommodate travel, medical care, work, and family demands. However, some patients may require intermittent booster sessions to solidify gains made during the active psychosocial intervention.

Another area warranting attention is the intervention format. Although published studies show that the structured educational format is more beneficial than the unstructured format, distress in cancer patients is not homogeneous.²⁹ Distress levels, support systems, and coping skills range widely. The challenge to the practitioner is to match the characteristics of individual patients with the most helpful and cost-effective psychosocial interventions.

In a reanalysis of their structured group intervention data, Helgeson et al²¹ examined baseline patient factors predictive of which intervention would be the most beneficial to an individual. Again, most patients benefited from the structured group educational intervention; in particular, those with the most baseline difficulties experienced the greatest improvements in psychosocial functioning. However, those who lacked emotional support at baseline benefited from the peer-led discussion intervention. Thus, a substantial amount of work remains to be done in exploring treatment-matching issues in the management of distress in cancer patients.

Another area requiring future investigation is the potential benefits of group vs individual formats. Group intervention is cost-effective because many patients can be seen at the same time. Group therapy offers social support from fellow cancer patients. However, such therapy may not be practical for patients who cannot attend at specific times. Individual sessions structured similarly to group sessions in terms of content have the advantage of being scheduled according to individual patient needs. The social support and cost benefits of group interventions need to be measured against the flexibility of individual treatment.

Numerous patient treatment-matching models developed for problems such as pain and nicotine dependence³⁰ have considered individual patient factors and needs in determining treatment selection. Recently, the National Comprehensive Cancer Network proposed guidelines for the management of distress that incorporate patient treatment-matching considerations.¹ Empirical research in this area is needed, and models for patient treatment-matching in psychosocial oncology need to be developed and tested. Screening approaches that consider type of distress, with triage to the appropriate intervention, need to be studied. Tumor type, disease stage, sex, distress level, social support availability, and coping history may prove to be important factors in matching patients to appropriate treatment modalities. Our belief is that focus on these issues will advance the understanding and management of distress in cancer patients.

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