Psychotherapy for Depression Among Patients with Advanced Cancer

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Cancer causes profound suffering for patients, and previous reports have demonstrated that psychological distress, particularly depression, is frequently observed in advanced and/or terminally ill cancer patients. Such depression can lead to serious and far-reaching negative consequences in patients with advanced cancer: reducing their quality of life and causing severe suffering, a desire for early death, and suicide, as well as psychological distress in family members. For the management of their distress, cancer patients are more likely to prefer psychotherapeutic interventions to pharmacotherapy, and psychotherapy is known to be effective for the management of depression among advanced cancer patients. Hence, psychotherapy is an important treatment strategy for alleviating their depression. Furthermore, patients with advanced and/or terminal cancer suffer from various physical symptoms and are forced to face a continuous decline in physical function. In addition, psychological defense mechanisms such as denial are frequently observed in these patients. Hence, an individually tailored and careful psychotherapeutic approach should be followed, which considers the specific nature of the advanced and/or terminal cancer. This review focuses on psychological interventions that can be utilized in the clinical oncology practice to ameliorate depression among advanced and/or terminally ill cancer patients, rather than focusing on the level of evidence for each intervention. In addition, the current review introduces some novel therapeutic strategies that have not yet been proved to be effective but show promise for future studies.

Key words: cancer – depression – psychotherapy

INTRODUCTION

Cancer treatment has tremendously progressed, and hence the development of cancer is not necessarily a death sentence. Nevertheless, approximately half of cancer patients actually die even today. In Japan, cancer has been the leading cause of death since 1981 and is the most common and representative life-threatening disease. Cancer causes profound suffering to patients, and previous studies have reported that psychological distress, particularly depression, is frequently observed in cancer patients, especially in advanced and/or terminally ill patients (1–4). Several studies have indicated that such depression can lead to serious and far-reaching negative consequences in patients with advanced cancer: reducing their quality of life and causing severe suffering, a desire for early death and suicide, as well as psychological distress in family members (5,6). These results imply that cancer patients experience depression and should receive appropriate management and care
during the course of their illness. Furthermore, psychological support is increasingly recognized as an essential component of the comprehensive care of cancer patients.

For the management of their distress, cancer patients are more likely to prefer psychotherapeutic intervention to pharmacotherapy, (7) and psychotherapy has been shown to be effective for the management of psychological distress among cancer patients (8). Thus, psychotherapy is an important treatment strategy for alleviating depression among cancer patients. However, patients with advanced and/or terminal cancer suffer from various physical symptoms and are forced to face a continuous decline in their physical function. In addition, psychological defense mechanisms such as denial are frequently observed in these patients (9,10).

Although many systematic reviews and meta-analyses have been conducted of psychological interventions for psychological distress among cancer patients (13–27), there is only one meta-analysis focusing on psychological interventions for depression in advanced cancer patients, for whom we have shown that psychotherapy is also useful for treating depression (28). That paper demonstrated that most psychotherapeutic approaches utilized supportive therapy. Probably because of the nature of the participants (i.e. people suffering from incurable cancer), all approaches involved some techniques that dealt with the impact of life-threatening disease on patients’ lives, including issues of ‘death’ or ‘existence,’ or both, in addition to providing general support (29,30). Another prominent characteristic of these studies is that the interventions essentially continued until the patients’ death.

Thus, this review focuses on the psychological interventions that can be utilized in clinical oncology practice to ameliorate depression among advanced and/or terminally ill cancer patients. It does not focus on the level of evidence for each intervention because only three types of psychological intervention—supportive therapy (counseling), group cognitive behavioral therapy (CBT) and supportive-expressive group psychotherapy—have been proved in randomized clinical trials to ameliorate depression among such patients (31–35). In addition, the current review introduces some novel therapeutic strategies, which have not yet been proved to be effective but are promising for future studies.

**PSYCHOLOGICAL INTERVENTIONS**

Various types of psychotherapeutic approaches have been developed over several decades, and cancer patients may benefit from many of these interventions. The optimal type may depend on the severity of depression, stage of disease, functional status of the patient, patient motivation to participate in psychotherapy and patient interest in self-reflection (35). In addition, we should recognize that psychological interventions that have the potential to reduce depression include not only interventions delivered by specialists in psycho-oncology but also the support provided by medical caregivers as part of routine cancer care (35). Table 1 presents a brief description of the commonly used psychological interventions for advanced cancer patients.

**Table 1. Description of commonly used psychological interventions for advanced cancer patients**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Description</th>
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<tbody>
<tr>
<td>Supportive psychotherapy</td>
<td>Utilized intermittently or continuously to help patients deal with distressing emotions, reinforce pre-existing strengths, and promote adaptive coping with the illness</td>
</tr>
<tr>
<td>Relaxation and progressive muscle relaxation</td>
<td>Utilized to achieve control over skeletal muscles and subsequently to reduce a patient’s emotional distress</td>
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<tr>
<td>Cognitive behavioral therapy</td>
<td>Focuses on recognizing and changing maladaptive thoughts and behaviors to reduce negative emotions and facilitate psychological adjustment</td>
</tr>
<tr>
<td>Problem-solving therapy</td>
<td>Focuses on generating, applying and evaluating solutions to identified problems</td>
</tr>
<tr>
<td>Group psychotherapy</td>
<td>Focuses on the expression of emotions in a supportive group environment to reduce negative emotions and promote psychological adjustment</td>
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acknowledging the denial can in itself be supportive for the patient. When providing supportive psychotherapy to advanced cancer patients, the therapist should help them to achieve a ‘good death’ (9). A Japanese study identified 18 important domains of a good death: (i) physical and psychological comfort, (ii) dying in a favorite place, (iii) a good relationship with medical staff, (iv) maintaining hope and pleasure, (v) not being a burden to others, (vi) a good relationship with family, (vii) physical and cognitive control, (viii) environmental comfort, (ix) being respected as an individual, (x) life completion, (xi) a natural death, (xii) preparation for death, (xiii) role accomplishment and contribution to others, (xiv) unawareness of death, (xv) fighting against cancer, (xvi) pride and beauty, (xvii) control over the future and (xviii) religious and spiritual comfort (39). Patients’ preferences and needs can differ (40,41), and therefore flexible and individually tailored psychological support to achieve a good death for the patient can be supportive in itself.

RELAXATION AND PROGRESSIVE MUSCLE RELAXATION

The aim of this intervention is to achieve control over skeletal muscles and subsequently reduce a patient’s emotional distress (42). Before a relaxation and progressive muscle relaxation session, the patient is instructed to maintain a special relationship with the space, chair and surroundings and to capture the silence of the place. The patient is also instructed to recognize every muscle contraction in order to avoid tension and achieve the deepest degree of relaxation. Progressive muscle relaxation involves systematic tensing and relaxing of various parts of the body. The therapist describes comfortable sensations in different muscle groups, progressing from feet to head and returning to different body parts (abdomen, face, eyes). After being thus trained, the patient is encouraged to use the technique at home and is often given an audio recording of the therapist’s instructions (43).

COGNITIVE BEHAVIORAL THERAPY

CBT combines cognitive psychotherapy with behavioral therapy, including behavioral activation. It aims to reduce emotional distress, including depression, by challenging and reversing irrational beliefs and distorted attitudes and encouraging patients to change their maladaptive preconceptions and behaviors (44). Generally, behavioral techniques are used in relation to a patient’s realistic worries and concerns such as actual loss, while cognitive techniques are used in relation to unrealistic worries and concerns such as their self-image. Behavioral techniques include activity scheduling and distraction with the use of a diary (45), in which the patients list the things they do and the mood/emotion they experience while doing those things. After 1 or 2 weeks, this is used to activate the patients’ life and improve their mood. Distraction is a method that can be used to empty the mind of worrying thoughts and replace them with neutral thoughts. When using distraction, patients are advised to describe to themselves in detail a picture, a scenery, a story, etc. or think of a relaxing image such as seashore or a lake. The cognitive techniques used are a thought diary, often used for self-monitoring and psycho-education, which includes talking to the patient about how thoughts affect mood. The use of a leaflet to introduce thinking errors to patients can also be helpful (44). For example, the definition of black and white thinking is introduced as ‘viewing situations, people or oneself as entirely bad or entirely good, with nothing in between’. For a cancer patient, this may be recognized in thoughts such as ‘My family never understands my needs. They never get it!’ Then, patients are introduced to cognitive re-structuring. The use of Socratic questioning is another central technique of CBT. This involves engaging patients in a dialog in which the therapist uses questioning to encourage the patients’ ideas. Some frequently used Socratic questions include ‘Can you tell me about...?’ and ‘What would happen if...?’ Such questioning provides a process of guided discovery.

CBT research now provides substantial evidence of its effectiveness in the treatment of many anxiety disorders and depression. Current evidence suggests that CBT is comparable to antidepressant medication for at least mild-to-moderate depression. Furthermore, the American Psychiatric Association Practice Guidelines indicate that among psychotherapy methods, CBT and interpersonal psychotherapy are the most efficacious for the treatment of depression (46). The Depression in Adults with Chronic Health Problems guidelines of the UK National Institute for Health and Clinical Excellence also recommends CBT for the treatment of depression among patients with chronic physical diseases (47).

PROBLEM-SOLVING THERAPY

Problem-solving therapy (PST) focuses on the present and helps patients to use their skills and individual resources to function better. Patients are taught how their psychological symptoms may be linked to psychosocial problems that they are facing and are provided with a structured strategy for resolving their problems (45). If these problems can be resolved, their symptoms may improve. PST includes the following seven steps: (i) explaining the treatment and its rationale; (ii) identifying, defining and breaking down the problem; (iii) establishing achievable goals; (iv) generating solutions; (v) evaluating and choosing the appropriate solution; (vi) implementing the chosen solution and (vii) evaluating the outcome after the implementation. PST is mainly used to help patients list and summarize problems commonly encountered by cancer patients. These include cancer treatment; symptoms; treatment side effects; fear of recurrence/metastasis; relationships with medical staff, family and other people; and economic, information and employment/school issues. PST also includes tips and worksheets for patients to use while progressing through each step of the treatment (45). Although the effectiveness of PST for ameliorating depression among advanced cancer patients has not been
rigorously tested, some studies have suggested that it is effective for cancer patients (48,49).

**GROUP PSYCHOTHERAPY**

Group psychotherapy is a technique using group dynamics and mutual support. Among the various types of group psychotherapy, supportive-expressive group psychotherapy (SEG'T), initially developed by Yalom et al. (30,33,34,50), is used the most for advanced cancer patients. The fundamental domains of SEG'T include confronting existential issues, promoting emotional expression and optimizing social support. Usually, the patients are encouraged to attend weekly group meetings (each group consisted of 3–12 members) lasting ≈ 90 min. In general, there are two facilitators who are often psychiatrists, psychologists, social workers or trained nurses. The therapy intends to foster support among group members and encourage the expression of emotions related to cancer and its broad-ranging effects on their lives, including physical, emotional, social and spiritual aspects. The patients are given the opportunity and support to talk about the effects of illness; its treatment; changes in their self-image and roles of and their relationship with family members, friends, coworkers, health-care providers and others. Participants also discuss the life-altering nature of the illness and coping and communication strategies. They are asked to attend the group sessions as long as possible if the sessions continue to be of benefit. To the best my knowledge, SEG'T is proved to be the most effective therapy to improve depression among advanced cancer patients (8).

**PROMISING NOVEL THERAPEUTIC APPROACHES**

There are some novel therapeutic strategies that have not yet been rigorously or fully tested for their effectiveness but are promising for future studies, especially in Japan.

**LIFE REVIEW INTERVIEW**

Ando et al. (51) developed a novel psychotherapeutic approach, the short-term life review, comprising two sessions over 1 week. Each interview session lasts between 30 and 60 min, and there is a 1-week interval between the two sessions. The interviewer first explains the purpose and the method of the short-term life review. The interviewer also needs to state clearly that the participant will be required to review his/her life because some participants would not be willing to do that. In the first session, the following questions are used to review participant’s life: (i) What is the most important thing in your life and why? (ii) What are the most vivid or impressive memories in your life? (iii) In your life, what event or person has affected you the most? (iv) What is the most important role you have played in your life? (v) What is the proudest moment in your life? (vi) Are there things you want to tell to some important people or your family? (vii) What advice or words of guidance do you have for the important people in your life or for the younger generation? After the first session, the participant’s narratives are recorded and the interviews are transcribed verbatim. The interviewer creates a simple album that includes key words from the answer to each question. The keywords are selected after a discussion between the participant and interviewer. The interviewer then pastes pictures or drawings from books or magazines that are related to the participant’s words or phrases to make the album beautiful and memory-provoking. In the second session, the participant and interviewer view the album together and the participant confirms the album’s contents. The interviewer tries to encourage the participant to feel the continuity of self from the past to the present, accept life’s completion and be satisfied with the life. After the second session, the interviewer presents the album to the participant. A small randomized controlled study has found the short-term life review to be effective in promoting spiritual well-being and reducing depression and anxiety among terminally ill cancer patients and helping them achieve a good death (52).

**DIGNITY THERAPY**

Dignity therapy is a novel, brief and individualized psychotherapeutic intervention, initially developed in Canada to address psychosocial and existential distress among terminally ill cancer patients (53,54). In this therapy, patients are interviewed typically for 30–60 min according to the dignity therapy question protocol. The questions are as follows: (i) Tell me a little about your life history, particularly the parts that you either remember most or think are the most important. When did you feel most alive? (ii) Are there specific things that you would want your family to know about you and are there particular things you would want them to remember? (iii) What are the most important roles you have played in life (family roles, vocational roles, community-service roles, etc.)? Why were they so important to you and what do you think you accomplished in those roles? (iv) What are your most important accomplishments and what do you feel most proud of? (v) Are there particular things that you feel still need to be said to your loved ones or things that you would want to take time to say once again? (vi) What are your hopes and dreams for your loved ones? (vii) What have you learned about life that you would want to pass on to your [son, daughter, husband, wife, parents, other(s)]? (viii) Are there words, or perhaps even instructions, that you would like to offer to your family to help prepare them for the future? (ix) In creating this permanent record, are there other things that you would like to be included? The therapy session is recorded, transcribed and edited as the ‘generativity document’. This document is provided to the participant after another session, in which the therapist reads the document and confirms it with the patient. A Japanese study group investigated the feasibility of providing dignity therapy to terminally ill cancer patients (55). There was a high refusal rate, and the reasons for refusal suggested a potentially
negative influence of introducing dignity therapy to some patients. However, ~50% of the participants evaluated dignity therapy as being useful, and 80% evaluated it as being helpful for the family. Thus, the conclusion is that although dignity therapy may not be recommended for all Japanese terminally ill cancer patients, it seems to be promising for some patients.

**Japanese Psychotherapy: Morita and Naikan Therapies**

Morita and Naikan therapies are Japanese psychotherapeutic methods introduced more than 50 years ago (56,57). While no trial has been conducted by using these therapies for cancer patients and their use may not be easily allowed in the current Japanese medical system, the concept of these therapies, based on Japanese culture, may still be helpful. The essence of these therapies is as follows.

Morita therapy, developed by Dr Masatake Morita, was originally devised for a neurotic condition called ‘shin-keishitsu,’ which is characterized by perfectionism, ambivalence and social withdrawal. Usually, Morita therapy includes the following four stages undertaken in an inpatient setting. (i) The first stage consists of virtual bed rest and social isolation lasting between 4 days and a week or more. The patient is instructed by the therapist to try to achieve a peaceful condition of both mental and physical restfulness. During this time, he/she is discouraged from indulging in self-recrimination or obsessing about things that he/she ‘should have done’ or ‘should be doing’. (ii) At the second stage, the patient is allowed to leave his/her room to engage in occupational therapy. Except this activity, he/she continues to spend time resting, contemplating and making observations on the prosaic aspects of everyday life. Frequently, the patient makes a daily record of events in a diary, which is read by his/her therapist, who annotates it and then returns it to the patient. This stage lasts from 3 days to a week, during which time the patient continues to be restricted in his/her social relationships. (iii) At the third stage, the patient is instructed to begin engaging in physical work. He/she is given permission to read selected books and have more contact with people in his/her environment. He/she is encouraged to accommodate to the external reality and cultivate the outlook of being at peace with the world around him/her. (iv) The fourth stage is described as the ‘life training period,’ and lasts for 1–4 weeks. At this juncture, the patient begins to resume some of the work related to his/her usual occupation and life. Morita therapy helps the patient to attain an attitude of ‘arugamama,’ which essentially comprises a philosophic acceptance of ‘things as they are’.

Naikan (literally, nai meaning ‘inside’ or ‘within’ and kan ‘looking’) is an introspective form of psychological treatment developed by a lay practitioner, Ishin Yoshimoto. It is a specialized form of continuous meditation based on a highly structured supervision of self-reflection. Three components are central to the therapy: (i) the content of the instructions for meditation, (ii) the themes on which the patient is told to reflect and (iii) the instruction method. Naikan is completed over a concentrated 7-day period. The patients is visited by the Naikan counselor at 90-min intervals and given a sequence of prearranged topics and themes on which to meditate. The Naikan method proceeds with the client devoting specific, timed periods of meditation while reviewing the central, interpersonal relationship in his/her life. In most instances, the process begins with a focus on the patient’s relationship with his/her mother. Relationships with the patient’s father, siblings, spouse, friends and so on are similarly reviewed in a chronological sequence during the week of meditation. During the meditation, the process of Naikan emphasizes two principal themes: (i) the rediscovery of personal guilt for having been ungrateful and irresponsible to others in the past and (ii) the discovery (or rediscovery) of a conviction of positive gratitude toward those who have extended themselves for the patient. Throughout the treatment, the Naikan counselor maintains a positive, empathic and benign attitude toward the patient.

**Conclusion**

In practice, all psychotherapies are patient centered but very flexibly provided, depending on each patient’s physical condition and needs. Various psychotherapeutic approaches have been developed over several decades. Although few have been proved to ameliorate depression among advanced cancer patients and very few Japanese studies have investigated the effectiveness of psychotherapeutic interventions using randomized controlled clinical trials (58), cancer patients may benefit from many of these interventions. Given the importance of cross-cultural differences in relation to patients’ preferences and the acceptability and the feasibility of psychosocial interventions (55,59), more studies from Asian countries, including Japan, are urgently needed. Knowledge of what types of interventions are acceptable, feasible and effective for Japanese advanced cancer patients still remains one of the core questions in Japanese clinical oncology practice.

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**Conflict of interest statement**

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**References**