

## EXPERIENCES IN MIDDLE EASTERN POPULATIONS

# Coping with Stress in Patients with Advanced Cancer

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### Abstract

The incidence and mortality of cancer are increasing day to day. Advanced cancer is cancer that has grown beyond the organ where it first started. Often it has spread widely throughout the body. In advanced cancer when cure is impossible, symptoms should be the focus of attention. Having advanced cancer can bring anxiety and uncertainty to life of patients. Most people who have survived cancer and completed their treatment will say that they live with the underlying fear that their cancer will return. Some people with advanced cancer are living longer and with better quality of life (QOL). Each person with advanced cancer has unique experience. Advanced cancer is not the same for everyone; it behaves differently depending on what patients' primary cancer diagnosis have been. Symptoms then get worse and treatments are needed to help them to control. These symptoms can often be treated. Likewise, each person faced with recurrent cancer will cope differently too. Assessing and understanding the impact of cancer on patients is, therefore, very important for providing the appropriate care and for improving patients' QOL. Understanding the reasons why some individuals become depressed and faced with some problems in advanced cancer has become an increasingly important area in palliative care. By interest in end of life care, clinicians, nurses, social workers, psychologists, and researchers alike have begun to focus their attention on identifying factors that might facilitate coping with advanced cancer. The goals of this study was to examine cancer related stressors and how patients coping with them. For understanding cancer related stressors and coping patterns of patients with advanced cancer current literature has been examined. In this study the specific symptoms and concerns which are faced by advanced cancer patients has been assigned shortly on a priori basis in to the dimensions of physical symptoms, psychological symptoms, social concerns and, existential issues. Coping with this stressors some useful coping strategies (problem focused and emotional focused approach) are suggested in this study. Framework which is developed by this study can be useful for understanding cancer related stressors, some interventions to assist cancer patients to manage symptoms (pain, fatigue) and coping strategies for health care staff who worked with advanced cancer patients. Health care staff who are aware of the common stressors in advanced cancer, palliative care and end of life care may identify more readily the need for support and assistance with coping strategies, thus improving the overall QOL of their patients. Providing psychological and social support requires interdisciplinary collaboration guided by a perspective of QOL in palliative care.

**Keywords:** Advanced cancer - QOL - depression - social concerns - stressors - psychological and social support

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### Introduction

Before reviewing recent coping strategies patients with advanced cancer advances in treating the psychological conditions related to cancer, we must consider stress that have a major influence on the current literature. Doctors now widely accept the view that cancer and its treatments constitute a stress imposed on a previously healthy individual, involving adjustment efforts (or coping) and possibly adjustment disorders. This stress concept treats psychological disturbances as the consequence of a sustained stressful situation.

Stress has long been a focus among researchers interested in psychosocial influences on health. Responses to stress are many and include physiological changes,

cognitive and emotional reactions as well as behavioral responses. In medical contexts, for example, stress can alter health habits, influence the recognition and reporting of symptoms and indeed the seeking of medical care. Stress has also been associated with failure to comply with medical regimens resulting in disease exacerbation. Current approaches to understanding stress emphasize the role of appraisal, in other words, events are stressful to the extent that they are perceived as such (Curtis et al. 2005). For people who have progressive and eventually fatal diseases, the months before death can be very stressful. The decline in health, treatment side effects, worries about death and dying, and changes in relationships with family or professional caregivers may all add to a heightened level of strain.

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Cancer and its treatments are stressful life events producing an acute stress reaction or a significant life change leading to continued unpleasant circumstances (Anderson, 1994; Guner et al., 2006). Patients experience periods of extreme stress. Hospitalization, illness, surgery, and nonoperative procedures are stressful to all patients and may produce adjustment disorder, because coping with pain, disability, or death challenges human adaptation. Stressors not related to medical problems, such as marital or job difficulties and financial problems, can also contribute to the development of adjustment disorder (De Faye et al., 2006). After a cancer experience, some of the changes that people reported are profound, such as reorienting their lives, rededicating themselves to their reconsidered priorities, coping with stress, feeling closer to God, appreciating more the everyday aspects of life, and being more intimate with their loved ones.

Cancer patients deal with a number of negative expectancies, including medical treatments and their side effects as well as the threat of future disease recurrence. These experiences may evoke negative psychological reactions. Although cancer can disrupt patients' relationships and their core values and beliefs, patients may confront these disruptions by acknowledging new coping skills and perspectives; in other words, positive changes result.

Advanced cancer patients with more traumatic distress attribute more positive outcomes from their cancer experience, such as improved relationships with others, enhanced life appreciation, and in general, more posttraumatic growth than those with less traumatic distress. Screening and intervention for posttraumatic symptoms are needed in advanced stages of cancer to provide relief of psychological symptoms and to improve a patient's QOL (Isikhan et al., 2001; Mystakidou et al., 2007).

Given that the experience of cancer, especially in advanced stages, can be a very stressful one, studies of coping are important for psycho-oncology. One limitation of the available research, however, is that "cancer" has typically been viewed as a unitary life stress, without considering that the illness actually imposes multiple stressors across various dimensions of function. As noted by some recent critics, the study of coping can perhaps be advanced by adopting a more narrow perspective on specific or immediate threats, rather than on the broader construct of illness in general (De Faye et al., 2006).

## Materials and Methods

This study prepared by reviewing that Embase, EBSCO HOST, WoS -Web of Science, Springer Link/Kluwer, Sage Publications, Sciencedirect, Psycarticles, Wiley-Blacwell, Proquest data base to look at key words "cancer, advanced cancer, stress, coping, terminally illnesses, physical symptoms, psychological symptoms, social concerns and, existential issues in cancer. When reviewed this data bases years limit not use. For understanding cancer related stressors and coping patterns of patients with advanced cancer current literature has been examined. In this study the specific symptoms

and concerns which are faced by advanced cancer patients has been assigned shortly on a priori basis in to the dimensions of physical symptoms, psychological symptoms, social concerns and, existential issues. Coping with this stressors some useful coping strategies (problem focused and emotional focused approach) are suggested in the following pages.

## Cancer Related Stressors

This cancer related stressors were informed by prevalence studies of various symptoms and concerns as well as by the identification of particular themes that have been considered relevant in other research related to stress and coping with cancer (De Faye et al., 2006).

### Physical Symptoms

The physical symptoms assessment reviewed pain, weakness, drowsiness, nausea, and dyspnea. Although this is not a comprehensive list of symptoms that can occur in advanced cancer, these specific items were selected based on their high prevalence in palliative care. In the physical dimension, pain is reportedly a problem that engenders a high level of fear among people with cancer (Wilson et al., 2000), and indeed most participants did report some degree of pain. On the other hand, pain was generally well controlled, and it was not identified most consistently as the worst physical symptom. Rather, weakness was considered the most troubling problem by 42.3% of respondents. Finally, earlier research has shown that a major source of existential distress for people with cancer is the prospect of disease progression, with its implicit threat to survival. This was also evident with 59.6% of participants citing concern about the future as their most significant source of existential distress (De Faye et al., 2006).

Careful evaluation of symptoms is the first step. In a series of cancer pain patients, 80% had two or more and 34% had four or more pains (Twycross and Fairfield, 1982). Only two-thirds of the pains were due directly to the cancer. The others were related to cancer and/or debility (e.g. muscle spasm, lymphoedema, pressure sores), or were due to anti-cancer treatment (e.g. peripheral neuropathy, chronic postoperative scar pain, or had been caused by a second disorder (e.g. spondylosis, arthritis, irritable bowel syndrome). With symptoms such as dyspnoea, anorexia, and constipation (which, unlike pain, cannot occur at multiple sites), there are usually multiple causes. For example, dyspnea may result from the combined impact of chronic obstructive airways disease, pulmonary metastases, pleural effusion, anaemia, extreme debility and anxiety. When evaluating any symptom, it is necessary to exercise an informed imagination. Evaluation should be followed by an explanation by the doctor of the reason(s) for the symptom. This reduces the psychological impact of the symptom on the sufferer. If explanation is omitted, the patient may be frightened by the assumption that his condition is shrouded in mystery because the doctor appears not to know what is wrong (Twycross, 1992).

With disease progression, it is perhaps inevitable that

all patients with advanced cancer will experience some problems eventually, at least with respect to physical symptoms, but some are able to carry on with great equanimity in the face of a terminal diagnosis. Evidently, the experience of advanced cancer is not invariably stressful in all domains, and there may even be potential for self-discovery, deepening relationships, and personal growth (De Faye et al., 2006).

Physical and existential distress were found to be positively associated with psychological distress whereas high social support and personal meaning are related to lower levels of psychological distress. Social support was the strongest correlate of global meaning whereas high levels of existential distress were related to lower levels of global meaning (Lethborg et al., 2007).

### *Psychological Symptoms*

Patients with advanced cancer can live more prevalent depression and anxiety among emotional or psychiatric problems. It is important to acknowledge the health care staffs that to improve QOL and planning services to the patients.

Studies relevant patients with cancer have indicated that certain coping efforts are differentially associated with psychological adjustment. Positive reinterpretation, use of humor, and acceptance have been shown to be associated with lower levels of concurrent distress in several studies. Avoidance coping, including both attempts to cognitively disengage from a stressor and attempts at behavioral avoidance such as drinking alcohol, have been consistently shown to predict higher levels of psychological distress, both concurrently and in longitudinal investigations of its impact on distress (Manne et al., 1999).

Patients with cancer are at increased risk of having coexistent depression. The prevalences of depression in these patients found in the research literature vary from 3% to approximately 69%. This variation is partly the result of methodological differences between studies (Chochinov et al., 1994; Payne, 1998; Lloyd-Williams, 1999; 2003). Depression is particularly common in cancer patients who suffer from pain and physical disability. Since pain and physical disability become increasingly common in the terminal phases of cancer, together with the threat of impending loss and separation, depression is particularly common amongst palliative care patients.

Depression adds significantly to the burden of illness experienced by palliative care patients. Depression may also result in physical symptoms becoming resistant to conventional treatments with improvement seen only as depression is appropriately treated. With such wideranging effects it seems likely that depression has an important adverse impact on the health-related QOL of palliative care patients. Studies using formal assessments of QOL have confirmed an association between depression and impaired QOL. Yet, since virtually all assessments of QOL include some measure of emotional wellbeing, such an association is surely inevitable. What remains unclear from existing research literature is whether depression is associated with (and thus may be contributing to) impairment on social and physical dimensions of QOL

(e.g., physical functioning, symptom load) (Smith et al., 2003).

There are no universally accepted criteria for diagnosing depression in the terminally ill patient. In the physically healthy population, depression is diagnosed if patients have a persistent low mood and at least four of the following symptoms present most of the day for the preceding two weeks (Endicott, 1984): In patients with advanced cancer, symptoms of fatigue and loss of energy and insomnia or hypersomnia are almost universal and there was much controversy over whether they should be included and, if so, their importance in the diagnosis of depression in such patients. Some workers reported that feelings of worthlessness, helplessness and hopelessness, feelings of excessive and inappropriate guilt and thoughts of self-harm were particularly discriminating; indeed, when somatic symptoms were omitted from the criteria, the point prevalence of major depression dropped from 42% to 24%. Discussing the complex matter of which symptoms are attributable to the cancer and which to depression, Endicott (1984) proposed modified criteria for depression in which alternatives were substituted for the somatic symptoms—for instance, instead of ‘poor appetite’, ‘fearfulness or depressed appearance in body or face’. Endicott also stressed the importance of asking patients with cancer about suicidal ideation.

Anxiety is a other response to a threat, cancer is threatening, and so many patients are anxious. In one study, 77% of 913 patients within 2 years of treatment recalled experiencing anxiety. However, anxiety after cancer diagnosis is not necessarily abnormal, may not present a problem, or may even be a constructive part of dealing with problems. An understanding of the nature of the anxiety in cancer patient populations is important because abnormal anxiety is disruptive and amenable to pharmacologic and psychological treatment. Our limited understanding of anxiety in cancer care is illustrated by the wide range of prevalence estimates of abnormal anxiety in cancer patient populations. This varied from 0.9% to 49% in one review of the literature, (Razavi et al., 1990; Stark et al., 2002) although in large studies using standardized psychiatric interviews and applying research diagnostic criteria the range is narrower, from 10% to 30%. The potential explanations for this range include the definition of morbid anxiety, the range of self-report measures applied without a clear understanding of their relation to morbid anxiety, social or demographic factors, and aspects of cancer diagnosis and treatment that may be associated with morbid anxiety (Stark et al., 2002).

One way to improve identification of anxiety disorders may be to identify subgroups with increased risk. Younger people, women, and people from lower socioeconomic groups in the general population are at high risk of anxiety. Anxiety symptom levels are high soon after the onset of cancer but reduce over time. Cancer treatments are associated with anxiety, but this is highly dependent on the specific circumstances. Studies in cancer have usually measured anxiety as a continuum rather than identifying morbid levels, so it is uncertain whether anxiety disorders or adaptive normal anxiety are influenced by such circumstances (Stark et al., 2002).

Psychological factors may contribute to the decision-making processes, and women who actively seek coping information may be offering an important clue about their level of emotional distress. Women with ovarian cancer who demonstrated active coping skills using positive reframing and acceptance techniques reported better functional, emotional, and physical well being as well as an overall higher QOL. Active coping skills may endow women with a heightened sense of control over their cancer experiences, lowering overall distress. Women with ovarian cancer have expressed a stronger need for information regarding and participation in their health care than patients with either breast cancer or prostate cancer, perhaps demonstrating their need to control and cope with a diagnosis of a disease that has such a poor prognosis (Ferrel et al. 2003).

The aims of psychological support and the therapy for cancer patients might be summarise like these:  $\Sigma$  to ameliorate or to decrease psychic morbidity;  $\Sigma$  to reduce psychological pain;  $\Sigma$  to arise the quality of help by psychological and social cohesion;  $\Sigma$  to fix anxiety, depression, destructive responses and other psychiatric findings;  $\Sigma$  to raise legislative power and the desire of struggling, to strenghten psychological-behavioral cohesion to cancer;  $\Sigma$  to provide an active participation to the therapies and to improve the sense of controlling their own life and illness;  $\Sigma$  to develop effective methods and manners in coping with psychological and physical problems associated with cancer;  $\Sigma$  to encourage the free expression of the covert reactions and emotions like anger, bitterness and feeling of guilt etc. and telling the thoughts about the illness;  $\Sigma$  to build up the communication between the patient's family and social interaction site (Ozkan, 1993).

### *Social Concerns*

Conceptually, social issues were defined as problems that involved relationships with people as individuals or relations with people as members of groups or society, including interactions with health professionals. Six character were included to address major social concerns that arise frequently with advanced cancer. The specific character in the social dimension were the sense of isolation from others, concern about a lack of information from health professionals, concern about a lack of consultation regarding care, a sense of loss around important social roles, financial strain, and a feeling of being a burden to others (De Faye et al., 2006).

Avoidance or withdrawal, acting uncomfortable with the patient's attempts to share feelings or concerns, criticizing how the patient is dealing with the illness, and behaving in an unkind manner have each been reported. Although there has been considerable theorizing about how social support works to reduce psychological distress, relatively few studies have directly examined potential mechanisms through which support impacts mental health, particularly among individuals with cancer. Some investigators have proposed that support can function as "coping assistance," a resource upon which individuals draw in order to deal more effectively with stressors. They argue that support precedes and influences coping. Support

providers may also encourage individuals to appraise their situation as less threatening and thus lead them to make a more benign interpretation of the situation with identification of effective coping strategies by advice-giving and encouragement. Support providers may also encourage individuals to appraise their situation as less threatening and thus lead them to make a more benign interpretation of the stressor or directly encourage a positive focus and cognitive restructuring efforts (Manne et al., 1999).

Social support provided by close family and friends has been shown to be associated with better adjustment for patients dealing with stressors. Among potential support providers, spouses have been shown to be a particularly important determinant of the patient's adjustment (Speigel, 1994; Manne et al., 1999).

One study has examined the association between support, coping, and psychological outcomes among cancer patients. Bloom (1982) studied the association between general perceptions of family cohesiveness and frequency of social contact, coping response and psychological distress, and self-concept and sense of power among breast cancer patients. Coping response was assessed with the endorsement (yes/no) of nine negative coping behaviors, including smoking, eating, drinking, and worrying. Her findings suggested that general perceptions of family cohesiveness and social contact predicted fewer negative coping responses, which led to less psychological distress. In the Bloom study, spouse-specific and cancer-specific support were not assessed, nor were constructive methods of coping. Consistent with the conceptualization of social support as coping assistance, coping mediated the association between family cohesiveness, social contact, and psychological outcomes. Less is known about the underlying mechanisms for the associations between negative aspects of responses from close others and psychological well-being. Such responses may ultimately be detrimental to coping efforts. Criticism, discomfort with another's attempts to share, or withdrawal may exert its effects in many ways; it may encourage maladaptive coping such as wishful thinking or cognitive avoidance; it may lead the individual to appraise the stressor as more threatening; it may reduce an individual's perceptions of his or her ability to handle the stressful situation: or it may reduce perceptions of personal control of the situation (Manne et al. 1999).

### *Existential Issues*

Existential issues included problems in maintaining a sense of control, loss of dignity, diminished life satisfaction, concern for the future, hopelessness, and loss of meaning (De Faye et al. 2006). Spirituality and preparatory grief remaining two subject when we reviewed the contex of existential issues in the literature. For improving interventions plans to the patient with advanced cance it is important to us that understanding spiritual needs of patients.

### *Spirituality*

Spirituality, which is typically defined as "the need

for finding satisfactory answers to ultimate questions about the meaning of life, illness and death” can help provide a framework that helps someone gain an understanding of him-or herself and cope with unpleasant or unavoidable circumstances without becoming depressed. Spirituality may be particularly important for individuals facing terminal illnesses because of the many physical, psychological, and social stressors that often accompany life-threatening diseases. In addition, the unpredictable nature of such illnesses may limit the effectiveness of traditional coping strategies (Nelson et al. 2002).

The finding that spirituality was strongly and negatively associated with depression is encouraging, particularly as researchers struggle to identify sources of resiliency in individuals coping with a terminally illness. Among the terminally ill, one’s religion may be a potential source of stress for those individuals who cannot perceive a deeper, more spiritual component. This may be due to a feeling of anger that patients sometimes feel toward a God who has caused them and their family so much pain. Because individuals with strong religious beliefs may not be comfortable with these angry feelings or are unable to accept or express the anger they feel toward their God, the resulting conflict may fuel the psychological distress these individuals already face. In addition, when patients suffer a crisis in faith, such as when they feel unprepared for their situation and are unable to find guidance through their religious beliefs, the religion that was once a source of strength or comfort may instead become a source of stress. Of course, these findings by no means diminish the importance of religion for many individuals. Religion and pastoral counseling are likely quite beneficial for those terminally ill individuals who are able to draw support from their religion and may help resolve many of the conflicts that arise in the course of a terminal illness (e.g., a crisis in faith). Many individuals are both spiritual and religious, although in other individuals these two constructs are more separate. Indeed, among individuals for whom the constructs of religiosity and spirituality are distinct, the beneficial aspects of spirituality and disadvantageous role of religiosity may be partly a reflection of their locus of control. Spiritual individuals are likely to draw their strength from within themselves and therefore feel in control of themselves and their spiritual well-being. In contrast, those who are religious but are not particularly spiritual may seek guidance through their religion, placing the source of control outside of themselves. This external locus of control can exacerbate feelings of helplessness, a possibility supported by research on depression and locus of control (Nelson et al. 2002).

#### *Preparatory grief*

Preparatory grief is the grief ‘that the terminally ill patient has to undergo in order to prepare himself for his final separation from this world’ (Lindemann 1944, Pagoropoulou and Vlahos, 2008). Although it may be a normal life cycle event, the terminally ill patient may experience extensive grief, thus creating social withdrawal and detachment. Grief may be a significant source of distress and might be a risk factor for health problems, suicide and death from other causes. Unlike the grief that

follows loss, preparatory grief increases the intensity of the tie to the person whose life is threatened and evokes a strong tendency to stay close to them. Lindemann (1944) first noted that ‘preparatory grief’ is the threat of death or separation that could itself initiate a bereavement reaction. During the course of a terminal illness, there will be many losses for the patients. Patients may reflect on the past and relive past moments or mourn for missed opportunities. They may grieve the loss of anticipated experiences such as the birth of a grandchild (Pagoropoulou and Vlahos, 2008).

In addition to preparatory grief, feelings of depression, hopelessness and anxiety are also common reactions of patients as they approach to terminal phase. Depression is not an inevitable part of the dying experience and can be treatable. Somatic symptoms are often present as a part of the normal dying process and may not help to distinguish between preparatory grief and depression. The depressed patient often has feelings of hopelessness and helplessness (Pagoropoulou and Vlahos, 2008).

Hope and hopelessness play an active role in the dying process. Hope at the end of life can come in various forms, for cure, for survival, for comfort, for dignity, for intimacy or for salvation. A grieving patient’s hope shifts but is not lost. It may shift from a hope for cure, to hope for life prolongation, to hope for dying well. Preparatory grief may help health care staffs interpret hope and hopelessness at the end of life and improve end of life care (Sullivan, 2003).

According to Kubler Ross, preparatory grief is the normal grief reaction to perceived losses experienced by patients who are dying (Kubler-Ross, 1997); however, it may also increase in intensity as the expected loss becomes more imminent. Identifying compounding grief from earlier losses, unfinished business and secondary gain may be necessary to enable the grief to be working through (Lindemann, 1944). Preparatory grief is an experience determined by a combination of psychological, social and physiological factors such as griever’s age, patient’s subjective experience on death and dying or socioeconomic status which have an impact on him or her (Pagoropoulou and Vlahos, 2008).

### **Coping Strategies with Stress in Patients with Advanced Cancer**

Coping has been defined as cognitive and behavioral efforts to manage demands that are appraised as taxing an individual’s resources (Lazarus & Folkman, 1984; Folkman, 1992). Coping has two major functions; management or alteration of the situation causing the problem (problem-focused coping) and the regulation of one’s emotional response to the situation (emotion-focused coping).

As an oncology social worker, we often use the word “coping” to describe how people deal with their cancer situation. People sometimes mistakenly think that coping means just living with a problem, whether they like it or not. But coping actually means managing a problem, and finding ways to take control of it. Our patients sometimes can’t control the fact that they or a loved one has cancer.

But we believe that patients can control how they react to and live with cancer.

The starting point for much of this research is the conceptual analysis of stress and coping offered by Lazarus in 1966 (Lazarus & Folkman, 1984). Lazarus argued that stress consists of three processes. Primary appraisal is the process of perceiving a threat to oneself. Secondary appraisal is the process of bringing to mind a potential response to the threat. Coping is the process of executing that response. Although these processes are most easily described as a linear sequence, Lazarus has emphasized that they do not occur in an unbroken stream. Rather, an outcome of one process may reinvolve a preceding process. For instance, realizing that an adequate coping response is readily available may cause you to reappraise a threat as less threatening. As another example, if a coping response is less effective than expected, you may reappraise the level of threat or reappraise what coping response is appropriate. The entire set of processes, then, may cycle repeatedly in a stressful transaction (Carver and Scheier, 1989).

#### *How People Cope with a Stressful Life Events*

To study the coping process, Lazarus and his colleagues developed a measure called Ways of Coping (Folkman & Lazarus, 1980), which has since been revised (Folkman & Lazarus, 1985). This measure consists of a series of predicates, each of which portrays a coping thought or action that people sometimes engage in when under stress. Respondents indicate whether they used each of these responses in a given stressful transaction (or a given portion of such a transaction), either by giving a yes or no response or by making a rating on a multipoint scale. Although most stressors elicit both types of coping, problem-focused coping tends to predominate when people feel that something constructive can be done, whereas emotion-focused coping tends to predominate when people feel that the stressor is something that must be endured (Folkman & Lazarus, 1980). The distinction between problem-focused and emotion-focused coping is an important one. It has proven, however, to be too simple.

#### *Problem Focused Coping*

A- Active coping is the process of taking active steps to try to remove or circumvent the stressor or to ameliorate its effects. Active coping includes initiating direct action, increasing one's efforts, and trying to execute a coping attempt in stepwise fashion.

Among cancer patients, behavioral interventions have focused most prominently on reducing emotional distress, relaxation and coping, and symptoms such as anticipatory nausea. Behavioral interventions for pain management have focused on massage therapy, muscle relaxation, music therapy, and exercise conditioning. Management of fatigue has focused primarily on exercise interventions. Trials directed toward multiple symptoms (some with relatively small sample sizes) indicate that patients can participate in strategies that reduce symptom severity.

This intervention was derived from cognitive-behavioral theory that specifies adaptive strategies that patients may undertake to address problems in everyday

living. This intervention followed the work of Bandura (1977; 1997), who proposed four approaches to developing self-efficacy: mastering skills through practice, observing others as they address problems, persuading oneself that the strategy will work, and convincing oneself that the strategy will reduce aversive symptoms. The goal of this cognitive behavioral intervention was to assist patients to acquire self-management knowledge, skills, and behaviors to address symptom problems. Cognitive behavioral strategies were developed to assist patients to reduce the severity of symptoms, their impact on emotional distress, and physical function. Four classes of cognitive behavioral strategies were identified from the literature: self-care management information, problem solving, communication with provider, and counseling and support (Given et al., 2004).

B-Planning is thinking about how to cope with a stressor. Planning involves coming up with action strategies, thinking about what steps to take and how best to handle the problem. This activity clearly is problem focused, but it differs conceptually from executing a problem-focused action. Moreover, planning occurs during secondary appraisal, whereas active coping occurs during the coping phase. Another aspect of certain kinds of problem-focused coping is a constriction in the range of one's phenomenal field. The person may suppress involvement in competing activities or may suppress the processing of competing channels of information, in order to concentrate more fully on the challenge or threat at hand (Carver and Scheier, 1989).

C-Suppression of competing activities means putting other projects aside, trying to avoid becoming distracted by other events, even letting other things slide, if necessary, in order to deal with the stressor. Another tactic from the arsenal of problem-focused coping is the exercise of restraint. Although restraint is often overlooked as a potential coping strategy, it sometimes is a necessary and functional response to stress.

D- Restraint coping is waiting until an appropriate opportunity to act presents itself, holding oneself back, and not acting prematurely. This is an active coping strategy in the sense that the person's behavior is focused on dealing effectively with the stressor, but it is also a passive strategy in the sense that using restraint means not acting.

E- Seeking social support is another coping response that can be considered as relevant to problem-focused coping. People can seek social support for either of two reasons, which differ in the degree to which they imply problem focus. Seeking social support for instrumental reasons is seeking advice, assistance, or information. This is problem-focused coping. Seeking social support for emotional reasons is getting moral support, sympathy, or understanding. This is an aspect of emotion-focused coping.

F- Behavioral disengagement is reducing one's effort to deal with the stressor, even giving up the attempt to attain goals with which the stressor is interfering. Behavioral disengagement is reflected in phenomena that are also identified with terms such as helplessness. In theory, behavioral disengagement is most likely to occur

when people expect poor coping outcomes (Carver and Scheier, 1989).

G- Mental disengagement is a variation on behavioral disengagement, postulated to occur when conditions prevent behavioral disengagement. Mental disengagement occurs via a wide variety of activities that serve to distract the person from thinking about the behavioral dimension or goal with which the stressor is interfering. Tactics that reflect mental disengagement include using alternative activities to take one's mind off a problem (a tendency opposite to the suppression of competing activities), daydreaming, escaping through sleep, or escape by immersion in TV.

We can summarise the aim of the problem-focused coping patient with advanced cancer as follows: to know how somebody is affected from a situation (chemotherapy, radiotherapy etc.); to try to analyse the process of thought and emotions; to list the alternative reactions and ideas; to put one or a few options into practice; to develop support system; to examine the approach of getting support; to keep self confidence and self control; to investigate the meaning of life.

To learn how to live with cancer, the patient and his family, when he is discharged from hospital, should be aware of their feelings, thoughts and how they are affected by this illness. The patient-while giving and getting support- should tell his desires obviously, go towards to the problem, know what to do in an emergency [during a crisis or in any needy circumstances] (Terakye, 1999).

#### *Emotional Focused Coping*

A- Denial is a response that sometimes emerges in primary appraisal. Denial is somewhat controversial. It is often suggested that denial is useful, minimizing distress and thereby facilitating coping. Alternatively, it can be argued that denial only creates additional problems unless the stressor can profitably be ignored. That is, denying the reality of the event allows the event to become more serious, thereby making more difficult the coping that eventually must occur. A third view is that denial is useful at early stages of a stressful transaction but impedes coping later on. Denial here as reports of refusal to believe that the stressor exists or of trying to act as though the stressor is not real.

B- Acceptance is the opposite of denial. It is arguable that acceptance is a functional coping response, in that a person who accepts the reality of a stressful situation would seem to be a person who is engaged in the attempt to deal with the situation. Acceptance impinges on two aspects of the coping process. Acceptance of a stressor as real occurs in primary appraisal. Acceptance of a current absence of active coping strategies relates to secondary appraisal. One might expect acceptance to be particularly important in circumstances in which the stressor is something that must be accommodated to, as opposed to circumstances in which the stressor can easily be changed.

C- Turning to religion is a final strategy in emotional focused coping response. One might turn to religion when under stress for widely varying reasons: religion might serve as a source of emotional support, as a vehicle for positive reinterpretation and growth, or as a tactic of active

coping with a stressor.

We can summarise the aim of the emotional-focused coping patient with advanced cancer as follows: to hope getting better; to pray; to eat and drink; to become angry; to desire for loneliness; to ignore (neglect); to go to sleep; to put the blame on somebody; to be in grief because you believe that it is your destiny; to cry and insulate yourself (Terakye, 1999).

#### *Individual Differences in Coping*

There are two ways to think about how individual differences might influence coping. The first, perhaps more obvious, possibility is that there are stable coping "styles" or "dispositions" that people bring with them to the stressful situations that they encounter. According to this view, people do not approach each coping context anew, but rather bring to bear a preferred set of coping strategies that remains relatively fixed across time and circumstances.

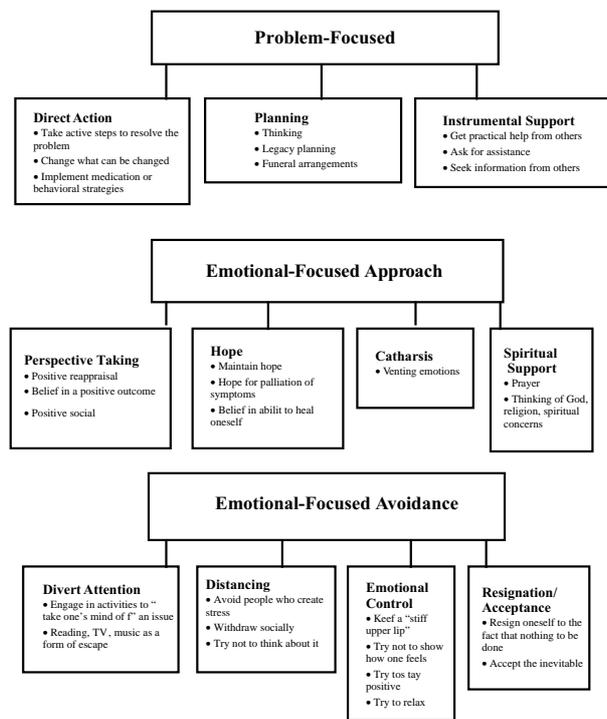
The idea that such stable coping styles exist is somewhat controversial. Folkman and Lazarus, for example, have repeatedly emphasized that coping should be thought of as a dynamic process that shifts in nature from stage to stage of a stressful transaction. Such a view suggests that the development of a coping style would at best be counterproductive, because it locks the person into one mode of responding rather than allowing the person the freedom and flexibility to change responses with changing circumstances (Carver and Scheier, 1989).

### **Coping with Stress in Patients with Advanced Cancer**

Coping is increasingly recognized as an important variable in understanding adjustment to cancer. Chronically ill persons report using more avoidant coping strategies such as escape/avoidance denial or behavioural disengagement than active coping strategies like problem solving when confronted with a stressful situation. Use of such avoidant strategies is associated with increased psychological distress, and may be a risk factor for adverse responses to illness (Curtis et al. 2005).

We can learn about on how patient cope with advanced cancer by the framework developed by De Faye et al. (2006) can be useful for health care staffs. De Faye and friends (2006) for assessment of coping was directed toward identifying individual cognitive and behavioral strategies that they participant in their study used when attempting to manage the single most significant problem in each of the three dimensions of stress (social, physical and existential). Developed by Cheng et al. (2000) at this framework every strategy in detail, in order to clarify the intent of the action as representing an effort to alter/solve the problem (i.e., problem-focused coping) or to manage the feelings associated with the problem (i.e., emotion-focused coping).

It has also been suggested that coping strategies can be further classified on a dimension of approach-avoidance or engagement-disengagement. The approach dimension refers to the tendency to focus on or deal directly with the stressful event, whereas the avoidance dimension refers



**Figure 1. Categorization of Coping Strategies in Patients with Advanced Cancer (De Faye et al., 2006)**

to ignoring, letting go, or minimizing the significance of the threat. Several studies have found that patterns of coping are related to psychological distress in people with cancer. For example, there is some indication that depressive symptoms are related to the use of avoidant emotion-focused strategies such as resignation-fatalism, passive-avoidant behavior, or blaming oneself and the environment. On the other hand, emotional approach strategies, such as positive reappraisal and actively processing emotions, have been associated with better adaptation. Despite these findings, however, much remains to be learned about how people cope with advanced illness. One particular issue concerns the fact that people with advanced cancer must cope concurrently with multiple problems across different dimensions of stress. It may be overly general to ask about “coping with a life-threatening illness,” rather than inquiring more concretely into specific individual problems (De Faye et al. 2006).

In general, people used combinations of coping strategies to deal with their stressors. However, there were broad differences across dimensions in the relative use of problem-focused and emotion-focused alternatives. Problem-focused coping was uncommon for existential issues, whereas emotion-focused approach and avoidance strategies were used less frequently for physical symptoms. Clearly, and perhaps obviously, people cope with different problems in different ways (Lazarus & Folkman, 1984).

*Sources of social, physical, and existential stress in patients with advanced cancer*

The result of the study De Faye et al (2006) shows us that the prevalence and severity of the different sources of social, physical, and existential stress. The most prevalent social concern was the feeling of being a burden to others. This was cited by 65.4% of participants as a

problem that occurred with at least a minimal level of severity, and it was identified as the most significant social concern by 48.1%. Other common social stressors (reported by at least a third of participants) were role loss (an issue for 40.4% of participants) and lack of information about their illness or treatments (36.5%). Nine (17.3%) participants were not distressed by any of the social issues included in the interview.

All of the physical symptoms occurred commonly and were reported by over 35% of participants in their study. Weakness was the most prevalent physical symptom (82.7%), followed by pain (73.1%). Weakness was also identified by the greatest number of participants (42.3%) as the single most distressing physical symptom. There were 5 (9.6%) participants who reported that they experienced no distress around any physical symptoms. The most prevalent existential issue was worry and concern about the future, which was cited as source of stress by 67.3% of participants. It was acknowledged as the greatest existential concern by 59.6%. It is important to note, however, that “concerns about the future” meant different things for different people.

For 21 (40.4%) participants, worry about the future was directed toward concerns about death and dying (e.g., not being ready to die, uncertainty about the time they had left, fear of a painful or prolonged death, being alone, concerns about an afterlife). Concern for the future welfare of family members was reported as the primary issue for 9 (17.3%) others, suggesting that for some participants there was also a social component to this existential concern. Seven (13.5%) participants reported that they experienced no distress at all as a result of any existential issues. Summarizing the result of the De Faye et al. show us that the stressors facing people who have a terminal illness are indeed complex and varied. However, they are not necessarily universal.

*Specific coping strategies in patients with advanced cancer*

Also, the results of the study De Faye and friends (2006) show us that the prevalence and severity of the different sources of coping strategies which is used by patients with advanced cancer. A participant is counted as having used a particular strategy as long as a relevant coping behavior was used at least once. For example, with physical stressors, direct action strategies were reported most commonly, with at least one such strategy being reported by 88.9% of the participants. Overall, the coping strategies that were used most widely across the dimensions of stress were direct action, seeking instrumental support, perspective-taking, and resignation/acceptance. These strategies were reported by at least half of the participants for all three dimensions.

Although it has sometimes been concluded that patients cope with cancer using mainly emotion-focused avoidance, the findings of the study of De Faye and friends (2006) suggest a more complex view of the coping process, which is dependent on the specific stressors that are being coped with. Some strategies, such as direct action, perspective-taking, seeking instrumental support, and resignation/acceptance, were used commonly across



of exploding with emotion at times. Survivors also discussed living with uncertainty and the stark reality that, for many with advanced disease, the prognosis was dismal. Similarly, women described feeling depressed but felt that these feelings were justified, because being overwhelmed with the reality of the disease led to inevitable depression. An important technique to combat these psychological difficulties was to focus on living, an idea that was expressed in 54 letters. Women depicted the importance of disregarding statistics about their prognoses or the possibility they would succumb to the disease, focusing instead on living for today and on the future. They demonstrated resolve with statements like always planning, always doing, that's part of the treatment-LIVING!

A positive emotion that was expressed in 61 letters was a renewed appreciation of life. Women frequently wrote to describe how they felt: as though life had been altered significantly by the ovarian cancer experience and how small events or experiences previously ignored in their lives were now of vital importance. This most frequently involved enjoying relations with others or enjoying the simple pleasures of life, such as those found in nature. Another positive display of coping involved 43 comments regarding supporting other survivors. The ability to provide support on an individual basis to a woman newly diagnosed with ovarian cancer or to engage in broader efforts such as starting support groups, participating in fundraising activities, or becoming involved in national ovarian cancer advocacy were expressions of purpose in their fight against disease.

Forty-one letters comprised the large theme of optimism, in which women keenly displayed their beliefs in the importance of a positive attitude. They frequently cited literature promoting the mind-body connection and the importance of having a positive outlook to guide the future. One woman described her optimism: "My way of coping is simply put: positive thinking sprinkled with complete realism. Rather than envy the people I know who have never been touched by cancer, I think often of the many I knew who were diagnosed after I was with several different types of tumors and who are no longer here. I actually consider myself very lucky!!" (Ferrel et al. 2003).

## **Psychosocial Support Services to Patients with Advanced Cancer in Turkey**

It's known that cancer which becomes prevalent in Turkey day by day could engender depression in patients (because of its psychological impact) and having psychological support in order to keep their mental health is important because the treatment is really hard and takes too long. Regarding cancer, together with medical treatment, psychological support plays an important role in the continuation of the patients' life expectancy and their QOL. Because cancer affects not only the patient but also his/her family and relatives. Therefore, some coping methods for a patient should be improved accordingly. Palliative care for eliminating the needs of cancer patients

have significantly developed since 1990 in Turkey. Especially, taking away the pain and symptom control is taken into great consideration along with the meeting psychosocial needs of the patients, families and care givers (Oguz, 1998; 2003).

In our country, the need for palliative care and hospis for the patients in terminal stage has increased nowadays. When the qualification and the proportion of primary health care staffs are considered, to rise the QOL a cancer patient in terminal stage, we need to organize, a sufficient number of health care staffs, new service models like hospis or home care, drugs and enough equipments. The need to present these services for the terminal patients will appear in a near future. For all the efforts that aim to rise the QOL terminal cancer patients, the education of the health staffs and to form institutions in this field are needed urgently.

It is vital to present the protective services in waging against cancer to the all members of all ages in society. In planning and organizing protective services, we should act in accordance with the importance of education before and during diagnosis and in every stage of the illness. In our country, this problems of the patients, their relatives and the health care staffs are ignored. To solve the problems, all the social supports (emotional, material and spiritual) should be activated.

In Turkey, to rise the quality of psychosocial support for cancer patients, it is certain that the labour force of the personnel working in this field should be reduced and they should be given different duties. The searches oriented to these groups are vital for determining the needs of the patient, his relatives and the health care staffs and for the services of good quality towards these unchanging dimensions. It can be said that the psychosocial support for the advanced cancer patients is very limited. The number of social workers who are working in the Ministry of Health are 539. 11 out of them work in oncology hospitals. Since 2002, psychosocial support subgroup and the frame of nationwide studies in this field have been built up depending on the Ministry of Health National Cancer Board.

Most important duties of the psychosocial support subgroup are as follows:  $\Sigma$  Besides psychological, social and economic problems, cancer patient and his relatives may have various problems in the relation of doctor and patient. They also have problems during treatment and other problems particular to cancer (pain and the control of it etc.). Moreover, there are different problems like transportation, sheltering, drug supply, conveyor chain and problems in the funeral and mourning time;  $\Sigma$  To prepare social support programs about being burnout, work stress, dissatisfaction of the job for the health care staffs working with cancer and to help in performing and supporting all these activities; to give enough consultancy services;  $\Sigma$  To carry on necessary studies in the education of cancer patient, the relatives and health care staffs about the sources of social support for the solution of these problems.

Each effort to reduce the effects of the stress of an advanced cancer patients contribute to the happiness in their end-stage by saving their prestige in terminal stage

and respecting their preference of death place; also, by attempting creative approaches that enrich spirit, beauty and aesthetic.

## Discussion

Cancer is a health problem which is of increasing importance today. Owing to the physical, psychological, social and economic changes brought about by long term chemotherapy and disease, the patient and his family are faced with many problems influencing the QOL of the patient adversely. Patients with cancer require increasing social and psychological support due to the aforementioned problems.

Adequate recognition and treatment of depression in patients with cancer can enhance QOL and help patients and families make best use of their remaining time together. Since patients are commonly reluctant to describe their depressive symptoms, staff need to know how depression can be recognized. Screening tools have a role, if used judiciously. Assessment of depression requires sensitive questioning about the patient's perception of his or her mood together with inquiry on areas such as guilt, hopelessness, helplessness and suicidal thoughts.

Symptom relief and psychological support are best offered within the context of multi-professional teamwork. Agreeing priorities and goals with the patient is important for restoring and maintaining hope. The patient needs to know that the doctor will not abandon him and that he is still valued as a person-even though he is dying. Hope and truth are vital components of palliative care. Creative activity and beauty do much to uplift the human spirit in the midst of suffering (Twycross, 1992).

Health care staff who are aware of the common psychological stressors of diagnosis, treatment, remission, recurrence, and end of life may identify more readily the need for support and assistance with coping strategies, thus improving the overall QOL of their patients. Providing psychological support requires interdisciplinary collaboration guided by a perspective of QOL in cancer survivorship.

We can suggest that it may be beneficial to include spouses in necessary interventions. Educating spouses about the potential negative impact of criticism or withdrawal on the patient's coping efforts may result in a reduction of these responses and may result in patients using less maladaptive coping. Conversely, strengthening positive emotional support and coping assistance provided by spouses may have a beneficial impact on both use of adaptive coping efforts as well as a reduction in emotional distress. The clinical implications of for coping interventions indicate that reducing the use of avoidant strategies, as well as enhancing a positive focus, may have beneficial effects.

Given the strong negative association between spiritual well-being and depression, existential or spirituality-based interventions may yield important clinical benefits for terminally ill individuals who are struggling to cope with their illness and prognosis. Of course, many health care staffs experienced in working with terminally ill individuals would likely focus their interventions toward

issues and topics that are more typically considered "spiritual" rather than simply focusing on the ritual practice aspects of one's religious faith. A more difficult question, therefore, is whether interventions focused more squarely on religious practices rather than the spiritual component of religion are likely to prevent the development of a depression or benefit those terminally ill individuals who have become depressed.

In the period from the starting of the illness to the death, the needs of the family can change. Therefore, they must use their energy levelly and they shouldn't burnout themselves because the patient needs them at any time. Social workers who are working in oncology settings have an important function in the plans after the illness for the patient and his family, the adaptation to changing role patterns and support of the patient for the social cohesion. They also take an active role in balancing the family member's service to the patient and the supply for their own desires. Social worker who is a member of the palliative team and not very emotional to the situation can help to families at listening to their worries, desires and needs. Social worker might elevate the QOL of the patients who have 6 months or less than 6 months to live and who can't get a medical care through social services. Social worker can help to the people for the indefinite changes about the illness or examining the death event and trying to find or create a meaning in the death process. We need to better understand the impact of physical suffering and meaning in the lives of this population and to actively work toward the enhancement of social support and connection with others for this group. Optimal palliative and familycentered care blended with therapies that promote a sense of meaning of life lived appear crucial to ameliorate suffering. Health care staffs' awareness of the common psychological stressors throughout the advanced cancer trajectory may allow them to identify more readily the needs for support, leading to improvement in overall QOL.

## References

- Anderson BL (1994). Surviving cancer. *Cancer Supplement*, **74**, 1485-93.
- Bandura A (1977). Self-efficacy toward and unifying theory of behavior change. *Psychol Rev*, **84**, 191-215.
- Bandura A (1997). *Self-Efficacy: The Exercise of Control*. New York, NY, Freedman.
- Bloom J (1982). Social support, accommodation to stress, and adjustment to breast cancer. *Soc Sci Med*, **16**, 1329-38.
- Carver CS, Scheier MF (1989). Assessing coping strategies: A theoretically based approach. *J Personality Social Psychol*, **56**, 267-83.
- Cheng C, Hui W, Lam S (2000). Perceptual style and behavioral pattern of individuals with functional gastrointestinal disorders. *Health Psychology*, **19**, 146-54.
- Chochinov HM, Wilson KG, Enns M, Lander S (1994). Prevalence of depression in the terminally ill: Effects of diagnostic criteria and symptom threshold judgments. *Am J Psychiatry*, **151**, 537-40.
- Curtis R, Groarke A, Robert C, Amina G (2005). Psychological stress as a predictor of psychological adjustment and health status in patients with rheumatoid arthritis. *Patient Education Counsel*, **59**, 192-8.

- De Faye BJ, Keith GW, Susan C, Raymond AV, Pippa H (2006). Stress and coping with advanced cancer. *Palliat Support Care*, **4**, 239-49.
- Endicott J (1984). Measurement of depression in patients with cancer. *Cancer*, **53**, 2243-8.
- Ferrell B, Stephany LS, Carey AC, Cindy M (2003). Psychological well being and quality of life in ovarian cancer survivors. *Cancer*, **98**, 1061-71.
- Folkman S, Lazarus RS (1980). An analysis of coping in a middle-aged community sample. *J Health Social Behavior*, **21**, 219-39.
- Folkman S (1992). Making the case for coping. In 'Personal Coping: Theory, Research and Application', Carpenter, B.(ed), Westport, CT: Praeger, pp. 31-46.
- Folkman S, Lazarus RS (1985). If it changes it must be a process: A study of emotion and coping during three stages of a college examination. *J Personality Social Psychol*, **48**, 150-170.
- Given C, et al (2004) Effect of a cognitive behavioral intervention on reducing symptom severity during chemotherapy. *J Clin Oncol*, **22**, 507-516.
- Güner P, Isikhan V, Kömürçü, S, et al (2006). Quality of life and sociodemographic characteristics of patients with cancer in Turkey. *Oncol Nursing Forum*, **33**, 1171-1176.
- Isikhan V, Güner P, Kömürçü S, et al (2001). The relationship between disease features and quality of life in patients with cancer -I. *Cancer Nurs*, **24**, 490-5.
- Kubler-Ross E. (1997). On Death and Dying: What the Dying Have to Teach Doctors, Nurses, Clergy, and Their Families, 1st edn. Simon and Schuster, New York, NY, USA
- Lazarus RS, Folkman S (1984). Stress, Appraisal, and Coping. New York: Springer.
- Lethborg C, Sanchia A, Shelley C, David K (2007) .To what extent does meaning mediate adaptation to cancer? The relationship between physical suffering, meaning in life, and connection to others in adjustment to cancer. *Palliat Support Care*, **5**, 377-88.
- Lindemann E (1944). The symptomatology and management of acute grief. *Am J Psychiatry*, **101**, 141.
- Lloyd-Williams, M. (2003). Depression-the hidden symptom in advanced cancer. *J R Soc Med*, **96**: 577-581.
- Lloyd-Williams, M. (1999). The assessment of depression in palliative care patients. *Eur J Palliat Care*, **6**,150-3.
- Manne SL, Stephen JP, Kathryn LT, James D (1999) Spouse support, coping, and mood among individuals with cancer. *Ann Behav Med*, **21**, 111-21.
- Mystakidou K, Efi P, Eleni T, et al (2007). Traumatic distress and positive changes in advanced cancer. *Am J Hospice Palliative Medicine*, **24**, 270-6.
- Nelson C, Barry R, William B, Michele GM (2002). Spirituality, religion and depression in the terminally ill. *Psychosomatics*, **43**, 3.
- Oguz Y, Miles SH, Buken N, Civaner M (2003). End of life care in Turkey. *Cambridge Quart Healthcare Ethics*,**12**, 279-84.
- Oguz, Y. (1998). Tıp etiği açısından yaşamın son döneminde karar verme süreçleri. *Tıbbi Etik*, **3**, 125-32.
- Ozkan S (1993). Psikiyatrik ve Psikososyal Açıdan Kanser. Psikiyatrik Tıp: Konsültasyon-Liyezon Psikiyatrisi, İstanbul, 153-172.
- Pagoropoulou A, Vlahos L (2008). Preparatory grief, psychological distress and hopelessness in advanced cancer patients. *Eur J Cancer Care*, **17**, 145-51
- Payne S (1998). Depression in palliative care patients: A literature review. *Int J Palliat Nurs*, **4**, 184-91.
- Razavi D, Delvaux N, Farvacques C, et al (1990). Screening for adjustment disorders and major depressive disorders in cancer inpatients. *Br J Psychiatry*, **156**, 79-83.
- Smith EM, Gomm SA, Dickens CM (2003). Assessing the independent contribution to quality of life from anxiety and depression in patients with advanced cancer. *Palliative Medicine*, **17**, 509-13.
- Speigel D (1994). Psychosocial support for patients with cancer. *Cancer Supplement*, **74**, 1435-57.
- Stark BD, et al (2002). Anxiety disorders in cancer patients: Their nature, associations, and relation to quality of life. *J Clin Oncol*, **20**, 3137-48.
- Sullivan MD (2003). Hope and hopelessness at the end of life. *Am J Geriat Psych*, **11**, 393-405.
- Terakye G (1999). Kanserle Yasamayı Öğrenmek, ESO KURSU. 5-7 Mayıs, Ankara.
- Twycross RG (1992). Care of the terminally ill patient. In: Triangle (Sandoz Journal of Medical Science) 'New Approaches to Supportive Care in Cancer', **31**, 1-7.
- Twycross RG, Fairfield S (1982). TITLE?? Pain, **14**, 303.
- Wilson KG, Scott JF, Graham ID, et al (2000). Attitudes of terminally ill patients toward euthanasia and physician-assisted suicide. *Arch Int Med*, **160**, 2454-60.