Coping, Anxiety and Depression in Turkish Patients with Cancer

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ABSTRACT

***Aim**: This study was performed to determine the levels of depression and anxiety, and coping strategies, and the effects of the levels of depression and anxiety on strategies for coping with stress in cancer patients.*

***Method**: The study was designed as a definitive and correlation searching investigation and has been performed at the Medical Oncology Clinic of Ataturk University Research Hospital between the dates July-August 2005. The study was carried out on 96 cancer patients. The question form prepared with the purpose of determining demographic and disease-related features (type of treatment, duration of disease and treatment) of the patients, and the Hospital Anxiety and Depression Scale (HAD), Strategies for Coping with Stress Scale in collecting the data.*

***Result**: It was determined that the type of treatment of 84.4% of the patients was chemotherapy only and mean duration of disease was 15.02±14.05 months, mean duration of treatment was 14.05±14.16 months. Anxiety was determined in 61.5% and depression in 81.3% of the patients. It has been found that patient benefited most from social support seeking strategy. This has been followed by problem solving strategy and avoidance strategy. A positive, statistically significant relationship was found between the avoidance strategy, and anxiety and depression levels of the patients.*

***Conclusion**: Patients experience moderate anxiety and depression. It was concluded that patients recruited active coping strategies mostly. Patients are observed to avoid stressful events with the increasing levels of anxiety and depression.*

***Key words**: Cancer, coping, depression, anxiety*

Türk Kanser Hastalarında Anksiyete, Depresyon Ve Baş Etme

Amaç: *Araştırma kanser hastalarının depresyon ve anksiyete düzeyi ve stresle başa çıkma stratejilerini belirlemek ve depresyon ve anksiyete düzeyinin stresle başa çıkma stratejilerine etkisini araştırmak amacıyla yapılmıştır.*
Metod: *Araştırma tanımlayıcı ve ilişki arayıcı araştırma olarak planlanmış ve Atatürk Üniversitesi Süleyman Demirel Tıp Merkezi Yakutiye Araştırma Hastanesi Medikal Onkoloji Kliniğinde Temmuz-Ağustos 2005 tarihinde yapılmıştır. Araştırma 96 kanser hastası ile yürütülmüştür. Veri toplama aracı olarak hastaların hastalıkla ilgili özellikleri (tedavi yöntemi, hastalık ve tedavi süresi) ve demografik özellikleri belirlemek amacıyla oluşturulan soru formu, Hastane Anksiyete ve Depresyon Ölçeği (HAD) ve Stresle Başa Çıkma Stratejileri Ölçeği kullanılmıştır.*
Bulgular: *Hastaların %84.4'ünün tedavi yönteminin kemoterapi, hastalık süresi ortalamasının 15.02 ± 14.05 ay ve tedavi süresi ortalamasının14.05 ± 14.16 ay olduğu tespit edilmiştir. Hastaların % 61.5 inde anksiyete, % 81.3 ünde depresyonun olduğu tespit edilmiştir. Hastaların en fazla sosyal destek arama stratejisini kullandığı belirlemiştir. Bunu sırasıyla problem çözme stratejisi ve kaçınma stratejisi takip etmiştir. Hastaların daha çok aktif baş etme stratejilerini kullandığı tespit edilmiştir. Hastaların kaçınma stratejisi ile anksiyete ve depresyon düzeyleri arasında pozitif yönde istatistiksel olarak anlamlı bir ilişki bulunmuştur. Yapılan istatistiksel analizde hastaların cinsiyet hariç diğer demografik özelliklerinin anksiyete, depresyon ve baş etme stratejilerini etkilemediği tespit edilmiştir.*
Sonuç: *Hastalarda orta düzeyde anksiyete ve depresyon olduğu ve daha çok aktif baş etme stratejilerini kullandığı belirlenmiştir. Hastaların anksiyete ve depresyon düzeyleri yükseldikçe stresli olaylardan daha çok kaçtığı tespit edilmiştir.*

Anahtar kelimeler: *Kanser, başetme, depresyon, anksiyete*

INTRODUCTION

Cancer is both a physical disease and a condition that has predominant psychosocial effects, contains uncertainties and threatens life leading to severe psychological problems in an individual (1). Patients with cancer face most of the stressors associated with diagnosis, illness and treatment. These stressors may generate coping strategy, which may affect the mental health (2). Cancer affects patients' lives and those of their families in different aspects. Cancer diagnosis and treatment brings changes in patients' personal paths of life, in their daily activities, work, relationships, and family roles, and it is associated with a high level of patient psychological stress. This stress shows up as anxiety and/or depression (3).

Anxiety and depression is the most common psychological problem encountered in patients with cancer. Anxiety can be defined as an unpleasant subjective experience associated with the perception of real or imagined threat and is a common symptom in connection with cancer (4). Anxiety is mainly related to uncertainty about the diagnosis, side-effects of chemotherapy or radiotherapy treatment, lack of social or personal control, progressive physical deterioration, and thoughts of near death (3). Studies performed have reported different levels of anxiety in patients with various types of cancer (5-9). Patients who are depressed may also have physical symptoms which are difficult to palliate and which may improve as their depression is appropriately treated (10). The reported incidence rates of depression in this patient group vary widely, and the reason for this may be the different criteria and methodology that authors use to diagnose depression (1,5,7,9,11,12). Coping has been defined as the way in which people respond and behave to stressful events (13). It has been stated that coping has two important functions including the handling of the problematic issue (problem-focused strategies) and arrangement of emotions (emotion-focused strategies) (14). In addition, the coping strategies are frequently studied by their efficacy. Effective active coping alleviates the problem and reduces emotional distress. Ineffective passive coping, however, exacerbates and intensifies the problem (13).

Studies have shown that various kinds of coping strategies are used in different types and stages of cancer (15-19). For instance, it has been reported that patients recruit the avoidance strategies for not wanting to accept the disease in the period of diagnosis (15) and for encountering more stressful events in advanced stages of the disease (19). Studies in the literature suggest that there is a relationship between the coping strategies recruited by patients with cancer and psychological symptoms including anxiety and depression. It has been stated that patients using ineffective coping strategies have higher levels of anxiety and depression and that benefiting from social support results in a marked reduction in the levels of anxiety and depression (3,9,20-28).

The recognition of coping strategies, by health team, may enable appropriate information and interventions to be provided at optimal times for each individual (29).

Table 1. Demographic features of the patients

Demographic features	n (%)
Female	42 (43.8)
Male	54 (56.3)
Marital Status	
Married	76 (79.2)
Single-Widow	20 (20.8)
Education Status	
Literate	43 (44.8)
Primary school	45 (46.9)
High school or above	8 (8.3)
Work Status	
Working	11 (11.5)
Not working	85 (88.5)
Occupation	
White-collar - Laborer	7 (7.3)
Free	41 (42.7)
Retired	8 (8.3)
Housewife	40 (41.7)
Expression of economical status	
Poor	35 (36.5)
Moderate	49 (51.0)
Good	12 (12.5)
Status of affording treatment costs	
With government support	78 (81.3)
On his/her own and with government support	18 (18.8)
People that the patient lives with	
Alone	9 (9.4)
With mother/father	6 (6.3)
With spouse and children	81 (84.4)
People caring for the patient	
Present	59 (61.5)
None	37 (38.5)

This study was performed to determine levels of depression and anxiety, and coping strategies in patients with cancer. We also investigated the effects of the levels of depression and anxiety on coping strategies in patients with cancer.

MATERIALS AND METHODS

Sample and Setting

This cross-sectional and descriptive correlational study was performed at the Medical Oncology Clinic of Ataturk University Research Hospital between the dates July-August 2005. The study population consisted of 112 patients who received treatment for cancer at this centre in these dates. Only 96 patients who were eligible for the study were enrolled into the study. Eligibility criteria included; 18 years old or older, easy to communicate with, able to read and understand in Turkish language, had adequate cognitive capacity to answer the questions, were not in the terminal phase of the illness and at least 4 months should have passed since the first diagnosis and accepted to participate in the study. Demographic features of the patients are given in Table 1.

The question form prepared with the purpose of determining demographic and disease-related features of the patients, and the Hospital Anxiety and Depression Scale (HAD), Strategies for Coping with Stress Scale in collecting the data.

The Question Form

The demographic questionnaire was used to assess patients' basic information such as sex, marital status, employment, education, occupation, expression of economical status, status of affording treatment costs, people that the patient lives with, and people caring for the patient. The questions included features related to the disease such as type of disease-treatment and duration of disease-treatment.

Hospital Anxiety and Depression (HAD) Scale

The validation and reliability studies of the Hospital Anxiety and Depression (HAD) Scale developed by Zigmond and Snaith (1983), were carried out by Aydemir et al. (30). The HAD scale has been prepared to screen for anxiety and depression in patients with physical disease. It contains anxiety and depression subscales. The cut-off points in the Turkish version of the scale are 10 for anxiety subscale and 7 for depression subscale. The Cronbach alpha coefficient has been found to be .85 in the anxiety subscale and .77 in the depression subscale. In this study, the Cronbach alpha coefficient was .84 and .69 in the anxiety and depression subscales, respectively.

Strategies for Coping with Stress Scale

The original form of the coping strategies scale has been developed by Amirkhan (1990). The validation and reliability studies in Turkey have been performed by Aysan (31). The scale includes three dimensions including problem solving, search for social support and avoidance. The first subscale measures strategies aimed at problem solving, the second measures those aimed at relaxation, obtaining support from others to improve interpersonal relations, and the third measures both physical and psychological withdrawal. High points obtained from the subscales of problem solving and

Table 2. Scores for levels anxiety, depression and coping strategies (n:96)

	Range	Mean±SD
Anxiety	0-21	11.06±5.08
Depression	0-21	11.44±5.26
Coping strategies		
Problem solving strategy[a]	11-33	22.68±5.51
Seeking social support strategy[a]	11-33	26.95±3.96
Avoidance strategy[b]	11-33	19.34±3.53

a; effective-active coping, b; ineffective-passive coping

search for social support indicates the use of positive coping strategies (effective-active coping). High points obtained from avoidance subscale indicates the use of negative coping strategies (ineffective-passive coping). The Cronbach alpha internal consistency coefficient has been found to be 0.89 in the problem solving subscale, 0.92 in the search for social support subscale, and 0.83 in the avoidance subscale. In this study, the Cronbach alpha was found to be 0.87 in the problem solving subscale, 0.90 in the search for social support subscale, and 0.81 in the avoidance subscale.

Procedure

The data were collected by means of face to face interviews held by researchers. The patients were previously interviewed to provide information on the objectives and topic of the study. The patients were informed that they were free to participate or not participate in the study and they could withdraw from the study at anytime they desired. The study was approved by the management of the hospital.

Statistical analysis

The coding and statistical analyses of the data were performed on computer using the SPSS 10.0 packed program. Analysis of variance, Pearson correlations and Student t test were used. P value less than 0.05 was denoted statistically significant.

RESULTS

It was determined that the type of treatment of 84.4% of the patients was chemotherapy only and mean duration of disease was 15.02±14.05 months, mean duration of treatment was 14.05±14.16 months. The most common diagnoses reported by the patients were gastrointestinal system cancer, respiratory system cancer, and urogenital system cancer. Statistical analysis showed that the descriptive features of the patients did not affect anxiety and depression levels except for sex. However, statistical analysis showed that descriptive features of the patients did not affect coping strategies. No statistically significant differences were determined between the disease-related features and depression-anxiety levels, and coping strategies.

The mean points of the patients were 11.06±5.08 and 11.44±5.26 for levels anxiety and depression, respectively. It has been found that patients benefited most from social support-seeking strategy (26.95±21.10). This has been followed by problem solving strategy (22.68±5.51) and avoidance strategy (19.34±3.53) (Table 2).The mean points for levels of anxiety were found to be higher among female patients and the difference was statistically significant (p= 0.012). Although the mean points for levels of depression were higher in females compared to males, the difference was not statistically significant (p= 0.065) (Table 3). A positive, statistically significant relationship was found between the avoidance strategy, and anxiety and depression levels of the patients (Table 4).

DISCUSSION

Anxiety and depression is the most common psychological problem encountered in patients with cancer, and effective coping strategies are to necessitate treatment and disease related psychological problem. In this study; patients experience moderate levels anxiety and depression. The anxiety and depression levels of patients

Table 3. Evaluation of mean points obtained from scales by gender

	Anxiety	Depression	Problem solving strategy[a]	Social support seeking strategy[a]	Avoidance strategy[b]
Women	12,52± 4,22	12.57±4.65	22.35±5.2	25.26± 3.64	19.04± 3.99
Men	9,92±5,44	10.57±5.57	22.94±5.77	24.57± 4.21	19.57±3.15
	t= 2,55	t= 1.86	t= -,515	t=,841	t= -,721
	p= 0.012	p= 0.065	p= 0.607	p= 0.211	p= 0.473

a; effective-active coping, b; ineffective-passive coping

Table 4. *The relationship between coping strategies and mean points for levels anxiety and depression*

	Anxiety		Depression	
	r	p-value	r	p-value
Coping strategies				
Problem solving strategya	- 128	0.216	- 161	0.118
Social support seeking strategya	- 025	0.813	- 002	0.987
Avoidance strategyb	225	0.012	281	0.006

a; effective-active coping, b; ineffective-passive coping

with cancer were found to be higher than obtained in other studies performed with HADS (4,25,32-35). The results of this study may be explained with presence of hospital-induced stressors and sparing of no time to or not noticing the emotional aspects of the medical services provided by institutions.

It has been found that patients benefit mostly from social support seeking and problem solving strategies (Table 2). These findings show that the sample of the present study used active-effective coping strategies more than ineffective-passive coping. Literature shows that patients with cancer recruit different coping strategies. Because coping is a multidimensional concept on which individual perception can be affected by the person's individual beliefs and values, the effect of cultural context on the coping strategy use of individuals with certain ethnic heritage may not be wholly excluded (36). The study of Zhou et al. (37), performed on patients with cancers of the gastrointestinal system has shown that patients recruit active coping strategies more than the passive ones. In the study of Kim et al., on the other hand, patients with cancer were found to benefit most from emotional-centered coping strategies. The latter study explains this finding with the inadequacy of patients with cancer in solving problems since cancer is a destructive disease. Similarly, Kim reports in his study that patients with cancer mostly recruit emotional-centered coping strategies and specifically speaking, these patients use mostly the blame and emotion expression. In this study, social support seeking was found to be the mostly used coping strategy (Table 2). Turkish people are quite sensitive to stressful situations that are related to their family and friends. Therefore, they help and support financially and spiritually their family and friends in difficult situations. Social support seeking was the preferred coping strategy, health staff can focus on teaching social skills and effective strategies for seeking support.

The mean scores for levels anxiety were found to be higher in female patients compared to male patients (Table 3). Other studies have also shown that female patients present with higher levels of anxiety and depression (38,39). Although the mean score for levels of depression was higher in females than in males, the difference was not statistically significant (Table 3). The study of Redeker et al. have also reported similar findings to our study including no statistically significant difference between the levels of depression of male and female patients (40). The level of depression was reported to be statistically significantly higher in females compared to males in the study of Carlson et al. (41). Since women care for the other members of the family (the elderly, children and relatives) and carry their responsibility, their concerns for not being able to carry out these responsibilities in case of a disease as well as the other problems that they have with their husbands may be the cause of their increased psychological stress. In particular, healthcare providers must be aware of possible difficulties that women patients with cancer might experience in adjusting to cancer treatment procedures, and anxiety and depression symptoms.

Males and females did not differ in terms of using the coping strategies. These findings show that sex does not affect using the coping strategies. However, it has been stated in the literature that sex is a factor affecting the coping strategies. Studies have shown that different coping strategies are used by both sexes. Hjörleifdottır et al., have stated that men mostly use positive coping strategies. Their study has shown that women recruit emotional-centered, whereas men recruit problem-focused coping strategies mostly (42). However, in the study of Sheila and Payne, women were reported to use problem solving strategies less than the other coping strategies. Contrary to our findings, in their study Kim et al., have found a statistically significant relation between sex and coping strategies and stated that women

use both emotional and problem-focused coping strategies less than men (43). This study failed to find a significant sex difference in coping strategies. Further studies are required to clarify this matter.

This study indicates that the avoidance strategies are strictly associated with the psychological status of patients with cancer. Patients are observed to avoid stressful events with the increasing levels of anxiety and depression (Table 4). Similar to our findings, studies performed on patients with various types of cancer have shown that there is a positive relation between the avoidance strategy and the level of depression and anxiety (22,23), and reported that anxiety (28,44) and depression (9,24) levels were found to be higher in patients recruiting the avoidance strategy more frequently. Therefore, it has been concluded that patients recruiting the avoidance strategy should be followed up for depression and anxiety, and attention should be paid to these patients (24). In addition, it has been stated in the study of Hassanein et al., that there is a strong relationship between ineffective coping strategies and anxiety and depression, and that patients using ineffective coping strategies have higher levels of anxiety and depression (25). It has been stated in the literature that inconsistent and avoidance coping strategies affect psychological health adversely. Therefore, avoidance is suggested to be an inappropriate strategy for coping with stress (31,45).

Despite findings reported in the literature about the positive role of problem solving and social support in anxiety, depression in with cancer, we could not confirm this association in our study. Studies have reported marked improvement in the levels of anxiety and depression of patients participating in cancer support groups compared to patients not participating in such groups (3,26). A negative correlation was also found between social support, depression, and anxiety in the study of Tagay et al. It has been reported that patients who receive adequate support from family and friends present with better disease-compliance and manifest less depressive symptoms (20,21). It has also been reported that patients who share their cancer experiences with others develop effective coping strategies and have better psychological disease compliance (3,46). In their study, Hassanein et al., have stated that there is a negative correlation between coping strategies and depression. Billings and Moos have reported that people with higher mean values for depression benefited less from problem-centered coping strategies (47). Patient education is important in increasing and maintaining the problem solving capabilities of the patients. These mixed findings suggest the need for further investigation of the relationship between anxiety and depression and coping strategies in cancer. Several limitations should be kept in mind when interpreting the results of the this study. The sample for this study was drawn from cancer survivors living in eastern Turkey. Therefore, generalization of these findings to individuals living in other geographic regions is limited. Our study involved limited number of patients. To generalize the results to Turkish population, further studies with larger populations are needed. We believe that this study will provide light for future research on this subject.

In this study, patients experience moderate levels of anxiety and depression. This study show that patients used active-effective coping strategies more than ineffective-passive coping, and that avoidance strategies are strictly associated with the levels of anxiety and depression of patients with cancer. Patients are observed to avoid stressful events with the increasing levels of anxiety and depression.

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