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Evaluation of coping strategies, social support, and depressive symptoms in spouses of patients with hematological cancer

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Aim: The purpose of this study was the evaluation of coping strategies, social support, and depressive symptoms in spouses of patients with hematological cancer.

Materials and methods: A descriptive design was used in current study. The study was carried out at the hematology clinic of 2 university hospitals located in İstanbul. The convenience sample consisted of 150 spouses of patients who had hematological cancer. The data were collected through structured face-to-face interviews using a questionnaire form, the "Ways of Coping" Questionnaire, the Multidimensional Perceived Social Support Scale, and Beck Depression Inventory. Percentage t-tests and Pearson's product moment correlation were used to analyze the data.

Results: The most common strategies of coping used by participants were positive reappraisal, distancing, and seeking social support. Perceived social support from family was high and the depressive symptom mean scores of spouses were at a serious level. There was a low negative correlation between coping strategies, perceived social support, and depressive symptoms.

Conclusion: The spouse's emotional reactions to hematological cancer might include a depressive symptom, which might be alleviated by certain coping strategies and perceived social support. Therefore, the health professionals need to be aware of coping behaviors and social support systems for spouses of patients with hematological cancer.

Key words: Coping, depression, hematological cancer, social support, spouses

Hematolojik kanserli hastaların eşlerinde başa çıkma yolları, sosyal destek ve depresif belirtilerin değerlendirilmesi

Amaç: Bu çalışmanın amacı, hematolojik kanserli hasta eşlerinin başa çıkma stratejileri, sosyal destek kaynakları ve depresif belirtiler arasındaki ilişkiyi incelemektir.

Yöntem ve gereç: Çalışmada tanımlayıcı araştırma tipi kullanılmıştır. Evreni, İstanbul'daki iki üniversite hastanesinin hematoloji servisinde yatan hastaların eşleri oluşturmuştur. Örnekleme bu hasta grubundan 150 hematolojik kanserli hastanın eşi alınmıştır. Veriler yüz yüze görüşme yöntemi ile toplanmıştır. Verilerin toplanmasında anket formu, Başa Çıkma Yolları Ölçeği, Çok Boyutlu Algılanan Sosyal Destek Ölçeği ve Beck Depresyon Ölçeği kullanılmıştır. Verilerin analizinde yüzdelik, t testi, pearson korelasyon analizi kullanılmıştır.

Bulgular: Katılımcıların en çok kullandıkları başa çıkma yöntemleri pozitif yaklaşım, mesafe koyma ve sosyal destek aramadır. Katılımcıların en çok algıladıkları sosyal destek aileydi ve eşlerin depresif belirti ortalama puanları ciddi düzeydeydi. Başa çıkma yolları, sosyal destek ve depresif belirti düzeyleri arasında zayıf negatif bir ilişki vardı.

Sonuç: Hematolojik kansere karşı hasta eşlerinde depresif belirtiler bulunabilir ve başa çıkma stratejileri ile sosyal destek bu emosyonel tepkiyi hafifletebilir. Bu nedenle sağlık profesyonellerinin hematolojik kanseri olan hastaların eşlerinin kullandıkları başa çıkma davranışları ve sosyal destek sistemlerinin farkında olması gerekir.

Anahtar sözcükler: Başa çıkma, depresyon, hematolojik kanser, sosyal destek, eşler

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Introduction

The frequency of hematological cancers is gradually increasing in both developed and developing countries (1,2). Hematological cancers are mostly malignant, appearing with symptoms like fever, respiratory infections, anemia, bleeding of the mucous membrane, lymphadenopathy, fatigue, weakness, and a loss of weight (3). The adaptation process to the disease is negatively affected by various side effects (e.g. nausea, vomiting, bone marrow suppression, and abdominal pain), caused by the combination of chemotherapy and other therapies (3,4). In addition to these treatment side effects, patients with hematological cancer must also strive to cope with psychosocial side effects, and problems such as stress, anxiety, and depression (5).

The diagnosis and treatment of cancer in one member of a family can have a significant practical and emotional impact on all family members, particularly the patient's spouses (6). From previous research, the relationship between the cancer patient and the spouse appeared to be a particularly important determinant of the patient's psychological adjustment (7,8). Spouses are assumed to be the patients' major source of social support (8). Research has shown that cancer patients' partners are at a high risk of developing a depressive disorder (9). They may also experience psychosocial problems related to an uncertainty about the outcome of treatment, the burden of care giving, the financial strain, anxiety, loneliness, and a sense of helplessness and/or hopelessness (10). If the spouses of hematological cancer patients can cope with these problems, the negative psychological consequences in the patients' condition may be prevented, or at least decreased (11).

Literature review

Stress is experienced when demands from the environment exceed the available resources and the mediating processes of appraisal and coping, thereby becoming crucial (12). The cognitive-appraisal model of Lazarus and Folkman (1984) is one of the most prominent theories of stress. As integral elements in this model, appraisal and coping have both been proposed as mediators of the stress response (13). Coping, as a process, involves some form of thought, action, or feeling that is used, modified, or eliminated to deal with an event that elicits some form of psychological stress. Appraisal is also presented as a perpetual process, evolving in time as the individual re-appraises the stressor (14). According to Lazarus (1984), there are 2 types of coping strategies: problem-focused, and emotion-focused. Problem-solving strategies are efforts to do something active to alleviate stressful circumstances, whereas emotion-focused coping strategies involve efforts to regulate the emotional consequences of stressful or potentially stressful events, i.e. how to relieve the feeling of stress without actually having to change the situation itself (13). Research indicates that people use both types of strategies to combat the most stressful events. The predominance of one type of strategy over another is determined by the personal style (e.g., some people cope more actively than others), and also by the type of stressful event; for example, people typically employ problem-focused coping to deal with potential controllable problems such as work-related problems and family-related problems. Where stressors are perceived as less controllable (e.g., certain kinds of physical health problems), more emotion-focused coping is prompted (15,16). Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events.

The literature indicates that a cancer diagnosis has significant effects on healthy members of the family, i.e. children, parents, and spouses (17). Researchers have generally agreed that spouses experience anxiety and depression more than the patients do, whereas patients have a greater difficulty adjusting in terms of family relationships (18). Psychosocial symptoms, such as sleeping and eating disturbances, nervousness, and difficulty meeting work demands, have been reported by 25% to 50% of the spouses of newly diagnosed cancer patients (19), and an estimated 20% to 30% have reported psychosocial impairment. Although there is growing evidence that spouses, like patients, are considerably affected by the cancer experience (20), there is relatively little information about the coping responses adopted by them as they adjust to the patients' illness.

In addition to this, for couples facing a mutually threatening event, such as cancer in one member of the couple, coping can have both individual and

interpersonal facets. Such an assessment is important, since these are assumed to be patients' major source of social support. Although studies were found regarding the coping strategies to control the illness of hematological cancer patients in the western population, no report was found on coping strategies by spouses of patients with these malignancies (21). In the Turkish population, few studies focused on the relationship between the perceived social support from family and the problem-solving skills in various cancer or COPD patients. Moreover, very few reports were found on the relationship of coping strategies, social support, and depression (22,23). In addition, some studies focused on patients with leukemia and Hodgkin's disease, and they reported several physiological and psychological difficulties of long-term survival with these diseases, i.e. a lack of energy, tiredness, anxiety, the fear of relapse, and further treatment (17,19). These problems are a common complaint often accompanied by depression.

The aim of the current study was to describe the coping, social support, and depressive symptoms consequences of spouses of patients with hematological cancer, as to their gender in depressive symptoms, and how those consequences might be related to their ways of coping and social support network. The following were the research questions: (a) What type of coping strategies did the spouses of patients with hematological cancer use? (b) Do females and males differ in coping strategies, social support and depressive symptoms? (c) What is the relationship among coping strategies, and social support to the depressive symptoms in spouses?

Materials and methods

Design

A descriptive design was used in the current study.

Subjects

For this study, convenience sampling was used (24). One hundred sixty spouses of persons treated for any kind of hematological cancer took part in this study. Ten persons were excluded because they could not remember any specific situation related to their spouse's illness as stressful. As a result, there were 150 spouses of patients with various types of hematological cancer included in the study: (38.4%) acute leukemia, (27.4%) chronic leukemia, (15.9%) Hodgkin's disease, (13.0%) non-Hodgkin's lymphoma, and (5.3%) multiple myeloma. The spouses were recruited from the hematology clinic of 2 university hospitals located in İstanbul. The spouses were asked to participate in the study by the researcher. Criteria for inclusion were physician diagnosis of a hematological cancer, in addition to being married to and living with a spouse. The spouses had to be literate and speak Turkish, and had not been diagnosed with a psychiatric disorder (Table 1).

The Ways of Coping Questionnaire (WCQ)

The coping ways of the sample was measured by the Ways of Coping (Revised). The Ways of Coping (Revised) is a 66 item questionnaire containing a wide range of thoughts and acts that people use to deal with the internal and/or external demands of specific stressful encounters. The revised Ways of Coping differs from the original Ways of Coping Checklist in several ways. The response format in the original version was Yes/No; on the other hand, on the revised version the subject responds on a 4 point Likert scale (0 = does not apply and/or not used; 3 = used a great deal). Redundant and unclear items were deleted or reworded, and several items, such as prayer, were added (14,25,26).

There are 8 sub-scales of the WCQ. These sub-scales are Confrontive Coping (alpha = .70), Distancing (alpha = 0.61), Self-Controlling (alpha = 0.70), Seeking Social Support (alpha = 0.76), Accepting Responsibility (alpha = 0.66), Escape Avoidance (alpha = 0.72), Planful Problem Solving (alpha = 0.68) and Positive Reappraisal (alpha = 0.79). In the manual for the WCQ, Folkman and Lazarus have defined emotion-focused coping and problem-focused coping. Distancing, Self-Controlling, Accepting Responsibility, and Escape-Avoidance are described as ways of managing a stressful situation through cognitive and emotional efforts without having to change the situation itself. Therefore, these strategies are characterized as predominantly emotion-focused coping. The remaining scales (Seeking Social Support and Positive Reappraisal) are more mixed in character, and could be seen as either emotion-focused or problem-focused coping, depending upon the situation (25).

The scale was adapted to the Turkish population by Sahin & Durak and (1995) Kutlu (1995). Sahin and Durak tested the psychometric properties of the Ways of Coping questionnaire on Turkish university students (27). This Turkish form of WCQ is a 30 question item and there are 5 sub-scales. Reliability coefficients for the WC-R sub-scales in the study were 0.62-0.80 (Accepting Responsibility), 0.64-0.73 (Helpless Approach), 0.47-0.72 (Escape-Avoidance), 0.49 to 0.68 (Positive Reappraisal), and 0.45 to 0.47 (Seeking Social Support). The validity study of the scale was obtained by correlating it with the UCLA Loneliness Scale (r = 0.62) and the Symptom Check List-90-R (r = 0.58) (33). The Ways of Coping scale was adapted for patients' families in the intensive care unit by Kutlu (1995). Cronbach alpha was 0.88 in the study of Kutlu. The 8-factor solution was calculated using varimax rotation; as a result, the 8-factor solution was accepted with 39.88% explained variance of the factor solution (28). This was used as Kutlu's version in current study. In current study, the Cronbach's alpha coefficients ranged from 0.63 to 0.92.

The respondents in the case of the WCQ were asked to recall a stressful situation from the previous week. A stressful situation was defined as one that was difficult or troubling, either because the person felt distressed, or had to use considerable effort to cope with the situation (25). In this study, the instructions of the WCQ emphasized that the recent stressful situation to be considered, when responding to the questionnaire, must in some way be related to life with the ill partner.

Multidimensional Scale of Perceived Social Support (MSPSS)

MSPSS, which consists of 12 items, was developed by Zimet et al. (1988) to identify the social support factors perceived by the individuals. The scale is comprised of 3 groups depending on the source of support, each group consisting of 4 items. These are family *(3, 4, 8, 11),* friends *(6, 7, 9, 12)* and a special person *(1, 2, 5, 10).* Each item is rated using a 7 range scale varying between "definitely no" and "definitely yes." The sum of 4 items under each sub-scale gives the sub-scale score, while the sum of all sub-scale scores gives the overall scale score. The lowest score in sub-scales is 4, and the highest is 28. The lowest overall scale score is 12, and the highest is 84. In terms of reliability, the internal consistencies of the total scale and the sub-scales are high, ranging from 0.79 to 0.98 in various samples; furthermore, the test-retest reliability over a 2 to 3-month period produces correlations ranging from 0.72 to 0.85 (29).

The scale was translated into Turkish by Eker and Arkar (1995), and the alpha coefficients in the Turkish population were 0.79, 0.82, and 0.86 for significant other, family, and friend sub-scales, respectively (30). The correlational analysis between the MSPSS, the Beck Depression Inventory (BDI) (31), and the Spielberger State-Trait Anxiety Inventory (STAI) (32) revealed that MSPSS was significantly and negatively correlated with the BDI, and the Spielberger STAI. This finding suggested that MSPSS is a valid scale (30). In current study, the alpha coefficients of the MSPSS were 0.94, 0.80, and 0.94 for significant other, family, and friend sub-scales, respectively.

Beck Depression Inventory (BDI)

The Beck Depression Inventory (BDI) is a self-assessment scale consisting of 21 items, designed by Beck et al. in 1961. The 21 items are further grouped into cognitive, somatic and affective aspects of depressive symptoms, and are rated on a 4-point scale ranging from 0 (absence of symptoms) to 3 (full manifestation of symptoms). Possible scores range from 0 to 63, with a higher total score signifying a higher presence of depression symptoms. Beck classified the depression scale scores as: 0-13 points, no depressive symptoms; 14-24 points, moderate depressive symptoms; and >25 points, serious depressive symptoms (31). Previous studies have shown that the BDI was a reliable and valid instrument that determined a severity of depressive symptoms in clinical settings and communities. The BDI has had high internal consistency, with alpha coefficients of .86 and .81 for psychiatric and non-psychiatric populations, respectively (32-34). The validity and reliability of the scale in Turkey was assessed by Hisli (1988). By looking at the correlation between the BDI and the depression sub-scale of the Minnesota Multiphasic Personality Inventory (35), the criterion-related validity of the scale was calculated to be 0.63 (36). The Cronbach's alpha

coefficient of the BDI was 0.80 in Hisli's study (36). In the current study, the alpha coefficient was 0.85.

Procedures

The study was carried out in the hematology clinic of 2 university hospitals located in İstanbul. During clinical visits, physicians identified patients who met the inclusion criteria, and were willing to participate in the study. Spouses were asked to attend a hematology clinic session. Data were gathered at the hematology clinic by the researcher. During data collection, the questions were read to the spouses, and the answers were marked on the questionnaires by the researcher, because most of the participants had poor basic reading and writing skills. To ensure confidentiality and to enhance truthfulness, the researcher collected data from each spouse in a private area.

All of the hospital directors of nursing, staff nurses, and ethics board were informed of the study, and their permission was received. Written consent was obtained from each participant. They were informed of the purpose of the research. Participants were assured of their right to refuse to participate or to withdraw from the study at any time. The anonymity and confidentiality of the participants were assured.

Data Analysis

Descriptive statistics were used to determine spouses' characteristics, their social support, and depressive symptoms scores. Raw scores and relative scores were calculated for the WCQ as described in the WCQ manual (25). Raw scores represent the sum of the items divided by the number of items in that sub-scale. Relative scores represent each raw score divided by the total of all the raw scores for the 8 sub-scales. Relative scores are expressed as a proportion for each type of coping sub-scale. High relative and raw scores indicate that a person frequently uses the behaviors described by that coping sub-scale. The differences in coping strategies, social support, and depressive symptoms for males and females were analyzed using independent samples *t*-test. The relationships among coping strategies, social support, and depressive symptoms were analyzed by Pearson product moment correlations. The significance level was set at 0.05.

Results

Sample Description

A total of 150 spouses of persons with hematological cancer took part in this study. Most of the spouses were women (n = 92, 61.3%). Hematological cancers are more commonly observed in men and this is true for Turkey as well. The mean age of the husbands was 45.66 (SD = 15.3) and that of wives was 42.22 (SD = 11.2). All participants were living with their spouses, and most had graduated from secondary school (in women n = 41, 52.6%; in men n = 30, 53.3%). Nearly all participants reported that the spouses were the most available source of support. Moreover, 53.3% of the male spouses, and 43.3% of the women, reported that they had low income. All participants had health insurance.

The mean duration of marriage was 17 years (range: 1-47 years) and 129 couples had children (see Table 1).

Coping Strategies

Based on the relative scores of the WCQ, the most frequently used coping strategies were Positive Reappraisal and Distancing, followed by Seeking Social support in the whole sample. As shown in Table 2, the other coping strategies were not as common. Planful Problems Solving was the least frequently used coping strategy among participants (t = 1.34, P = 0.18). The levels of Positive Reappraisal used as a coping strategy was similar for females and males, with an average of 1.17 ± 0.62 and 1.10 ± 0.52, respectively (t = 0.76, P = 0.44). Similarly, levels of Distancing for females and males had an average of 1.12 ± 0.45 and 1.12 ± 0.51, respectively (t = 1.26, P = 0.20). In addition, for Seeking Social Support had an average of 1.00 ± 0.57 and 1.03 ± 0.61, respectively (t = 0.31, P = 0.75).

Social Support and Depressive Symptoms

The level of perceived social support from family in all spouses was highest, with an average of 22.04 ± 5.51. The level of perceived social support from family was similar for females and males with an average of 22.61 ± 4.64 and 21.12 ± 6.60 (t = 1.63, P = 0.10), respectively. Similarly, the perceived social support from friends had an average of 15.83 ± 8.43 and 15.93 ± 8.63 (t = 0.06, P = 0.94), respectively. Furthermore,

Table 1. Demographic characteristics of samples.

Variations	Women (n = 92)		Men (n = 58)	
	n	(%)	n	(%)
Age				
20-35	26	25.5	10	16.6
36-45	35	31.0	21	37.1
46-55	26	25.5	18	28.3
56 ↑	15	18.0	17	18.0
Education level				
Primary school	15	16.7	12	22.7
Secondary school	41	52.6	30	53.3
High school	30	26.7	11	20.7
University and above	6	4	5	3.3
The strongest social relationship				
Parents	24	26.6	7	14.6
Spouse	30	37.4	21	48.0
Brother or sister	24	20.0	13	18.0
Friend	14	16.0	17	19.4
Perceived income level				
Low	47	43.3	30	53.3
Middle	25	23.3	12	21.3
Good	10	20.4	8	12.7
Very good	10	13.0	8	12.7
Medical diagnosis of spouses				
Acute leukemia	33	38.4	14	35.9
Chronic leukemia	27	27.4	9	16.6
Hodgkin's disease	14	15.9	11	21.3
Non-Hodgkin's	10	13.0	14	15.9
Multiple myeloma	8	5.3	10	10.3
Children				
Yes	81	92.7	48	81.6
No	11	7.3	10	18.4
Total	92	100	58	100

for the perceived social support from the significant other had a means of 16.13 ± 9.10 and 14.41 ± 8.94 (t = 1.13, P = 0.25), respectively (see Table 3).

The mean score for depressive symptoms was 33.42 ± 15.11, in all spouses (range: 0 to 63). Females and males were also similar in their level of depressive symptoms, with a means of 25.16 ± 13.94 and 23.26 ± 11.34 (t = 1,259, P = 0.21), respectively (see Table 3).

Relationship among coping strategies, social support, and depressive symptoms

A low negative correlation was found between distancing coping scores and depressive symptoms of the spouses (r = -0.23, P < 0.05). In the sample, it showed a low negative correlation between the escape-avoidance coping strategy scores and the depressive symptoms (r = -0.25, P < 0.05), and Planful

Table 2. Mean scores of Coping Ways sub-scales.

Coping sub-scale	Focus	Total Sample (n = 150) Mean	(SD)	Females (n = 92) Mean	(SD)	Males (n = 58) Mean	(SD)	t-test P value
Positive Reappraisal	P/E	1.18	0.47	1.12 [ns]	0.45	1.10 [ns]	0.52	t = 1.26 P = 0.20
Distancing	E	1.15	0.58	1.17 [ns]	0.62	1.12 [ns]	0.51	t = 0.76 P = 0.44
Seeking Social Support	P/E	1.01	0.58	1.00 [ns]	0.57	1.03 [ns]	0.61	t = 0.31 P = 0.75
Escape-avoidance	E	0.92	0.45	0.91 [ns]	0.45	0.92 [ns]	0.44	t = 0.09 P = 0.92
Self-Controlling	E	0.88	0.52	0.89 [ns]	0.55	0.86 [ns]	0.48	t = 0.30 P = 0.75
Accepting Responsibility	E	0.82	0.57	0.88 [ns]	0.63	0.73 [ns]	0.45	t = 1.60 P = 0.11
Confrontive	P	0.62	0.52	0.67 [ns]	0.58	0.53 [ns]	0.41	t = 1.58 P = 0.11
Planful Problem Solving	P	0.55	0.59	0.60 [ns]	0.60	0.46 [ns]	0.57	t = 1.34 P = 0.18

Coping focus: P: problem-focused; E: emotion-focused
[ns]: Nonsignificant (P > 0.05).

problem-solving coping strategy and depressive symptoms (r = -0.32, P < 0.05), and also between the perceived social support from family and depressive symptoms (r = -0.20, P < 0.05) (see Table 4).

Females and males showed a low negative correlation between depressive symptoms scores and Distancing coping strategy scores (r = -0.33, P < 0.05; r = -0.21, P < 0.05, respectively) and a low negative correlation between Positive Reappraisal coping and depressive symptoms (r = -0.25, P < 0.05; r = -0.38, P < 0.05, respectively). Females and males showed also a low negative correlation between Planful problem solving and depressive symptoms (r = -0.21, P < 0.05; r = -0.18, P < 0.01, respectively (see Table 4).

Similarly, both groups had showed a low negative correlation between the perceived social support from family and depressive symptoms (r = -0.22, P < 0.05; r = -0.18, P < 0.05, respectively). However, no correlation was found between the perceived social support from friends and depressive symptoms (r = -0.12, P > 0.05; r = -0.15, P > 0.05, respectively), and between the perceived social support from the

Table 3. Mean scores of perceived social support and depressive symptoms.

	Total Sample (n = 150)		Females (n = 92)		Males (n = 58)		t-test P value
	Mean	(SD)	Mean	(SD)	Mean	(SD)	
Depressive symptoms	33.42	15.11	25.16 [ns]	13.94	23.26 [ns]	11.34	t = 1.25 P = 0.21
Social support							
Family's support	22.04	5.51	22.61 [ns]	4.64	21.12 [ns]	6.60	t = 1.63 P = 0.10
Friend support	15.87	8.48	15.83 [ns]	8.43	15.93 [ns]	8.63	t = 0.06 P = 0.94
Significant other	15.46	9.05	16.13 [ns]	9.10	14.41 [ns]	8.94	t = 1.13 P = 0.25

ns: Nonsignificant (P > 0.05).

Table 4. Correlation of coping strategies, social support, and depressive symptoms.

Coping strategies	Depressive symptoms		
	Total Sample (n = 150) r	Females (n = 92) r	Males (n = 58) r
Distancing	-0.23*	-0.33*	-0.21*
Positive Reappraisal	-0.10	-0.25*	-0.38*
Seeking Social Support	-0.13	-0.09	-0.05
Escape-avoidance	-0.25*	-0.09	-0.10
Self-Controlling	-0.08	-0.03	-0.29*
Accepting Responsibility	-0.15	-0.12	-0.04
Confrontive	-0.07	-0.14	-0.12
Planful Problem Solving	-0.32*	-0.21*	-0.18*
Social support			
Family's support	-0.20*	-0.22*	-0.18*
Friend support	-0.03	-0.12	-0.15
Significant other	-0.10	-0.07	-0.11

*P < 0.05

significant other and depressive symptoms (r = -0.07, P > 0.05; r = -0.11, P > 0.05, respectively) (see Table 4).

Discussion

This study was conducted to examine coping strategies, perceived social support, and levels of depressive symptoms for spouses of patients with hematological cancer. Few studies have indicated the coping strategies used by patients and their spouses in various types of hematological cancer. In this study, spouses used 3 varieties of coping strategies to help them modulate stressful situations; these are emotion-focused strategies, problem or emotion-focused, and problem-focused strategies. According to McDonell et al. (37), problem-focused coping was related to knowing more, emotional-focused coping was related to the acceptance and holding of oneself. Lazarus and Folkman (1984) reported that when depressive symptoms were high, more emotional-focused coping strategies in stressful situations were used; and when symptoms were moderate, problem-focused coping strategies were more widely used. The mean score of emotional-focused coping strategies was also higher than that of problem-focused coping strategies, in a study by Shields et al. that focused on spouses of patients with breast cancer (38). This result (emotional-focused coping mean score greater than problem-focused coping mean score) was also similar for spouses of persons with spinal cord injuries (39). This situation was strongly supported by the findings of the current study, where more emotional-focused coping strategies were used than problem-focused coping strategies (see Table 2).

A Distancing coping strategy is the spouse not being interested in the partner's health problems. Alternatively, a spouse of a patient with cancer may experience difficulty in using distancing coping strategies. This belief is supported by Kathryn et al. (40), who found that the presence of a chronically ill person, whose spouse or significant other was ill, resulted in each partner being affected more by his or her own worries and the ability to cope with issues, than by the partner's problems. Previous studies conducted in Turkey reported that the level of cancer knowledge of the Turkish population was inadequate (41). Educational programs for hematological cancer are not prevalent. The findings in the current study suggest promoting the importance of educating families, and especially 'spouses', to adopt the right information.

Perceived social support from the family was high. There were no significant differences in the perceived social support from family, friends, and significant other between husbands and wives. The high mean for family support is congruent with the study of Bishop et al. (17) on spouses of patients who were hematological patients in North America. This result may be based on the nature of Turkish culture, and the demographic characteristics of the participants. Almost all Turk families, and most of the Turkish people, value family intimacy and family cohesiveness. Furthermore, the mean ages in the present study of spouses were 45.66 and 42.22 years, respectively. Turkish culture has a strong tradition of maintaining helpfulness and protecting children. In addition, the major sources of support that participants (both husband and wife) identified in the present study were their spouses, children, and friends. The possible explanation for this result might be that both husbands and wives were married and all lived with their spouses. The children of people at this age are usually grown up already, and are more likely to be ready to take responsibility for self-caring.

Our mean score for depressive symptoms was higher than that reported by Bulsara et al. (42). These results were also higher than the result (30.3) found in a study of spouses of patients with mental illness (43). Previous studies have indicated that spouses of patients with cancer feel anxiety, despair, and loneliness because of the difficulties of being involved in their partners' disease and care (18,20). These studies were strongly supported by the findings of the current study. Although the occurrence of anxiety and depression among spouses of patients with cancer has been documented (9,10), these findings could be explained by their need to repress any negative impact on life and to focus on positive aspects in an attempt to protect themselves during this difficult situation. No significant gender difference in the depressive symptoms between husbands and wives is congruent with the study of Bulsara et al. on spouses of patients with hematological cancer in Australia (42). Thus, healthy spouses may experience similar feelings by living with a partner with a long-term disease.

Both husbands and wives in this study showed an inverse relationship between the used coping strategies and the perceived social support from family, friends and significant other, and depressive symptoms (see Table 4). Thus, spouses who used fewer coping strategies, and were dissatisfied with their social relationship, were likely to be depressed. According to Lazarus and Folkman (1986), appraisals of stress and coping explained a significant amount of the variance in depression and social support (26).

The study is limited by its non-probability sampling, and consisted of couples that agreed to participate in one area of Turkey. The majority of spouses were women, but analyses could not be conducted to determine patient–spouse differences. Further studies are needed. The levels of the used coping strategies, the perceived social support, and depressive symptoms experienced by the spouses after the diagnosis were determined. A comparison of the scores of the husbands and wives before and after the diagnosis or stage of cancer could have determined whether hematological cancer had any effect on these variables. Future study is recommended to explore whether coping strategies, depression, and perceived social support from family, friends, and significant others change over time. Furthermore, future studies may have the comparison data of different types of cancer patients.

Conclusion

The most reported coping strategies by spouses of hematological cancer patients were positive reappraisal, distancing, and seeking social support. The level of emotional-focused coping strategies and the perceived social support from family, friends, and significant others reported by husbands and wives of hematological cancer patients were similar. The 2 groups were also similar regarding the levels of depressive symptoms. Family responsibility and interdependence among the family members are key characteristics in the Turkish populations. The results indicate that healthcare professionals need to be sensitive to the feelings of the spouses. They also have a responsibility to create an atmosphere where spouses, as well as patients, feel that they can express despair, existential concerns, and discuss problems. In addition, they should be given support in handling practical matters and coping with their thoughts about the future. Such knowledge can be used to provide essential information and counseling to help families cope more effectively with the survival of cancer. Inclusion of family members in the cancer treatment period is crucial, and their collaborative roles with healthcare professionals in providing holistic cancer care should be highlighted. Interventions, therefore, should include efforts to strengthen coping strategies, and increase social networks to relieve or reduce the stress of family burden.

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