Original Article

Influence of Demographıc Factors on Perceıved Socıal Support Among Adult Cancer Patients in Turkey

T Özbayır, F Gök¹, S Arıcan², BŞ Köze, Y Uslu³

Department of Surgical Nursing, Faculty of Nursing, Ege University, Izmir, ¹Department of Surgical Nursing, Pamukkale University of Health Sciences Faculty, Denizli, ²University of Health Sciences, İzmir Bozyaka Education and Research Hospital, İzmir, ³Department of Nursing, Acıbadem University Faculty of Health Sciences, İstanbul, Turkey

Abstract

Background: Social support, acknowledged as a protective factor against diseases, produces positive results in the prognosis of cancer patients. **Objective:** There is no relevant studies on perceived social support and factors related to Turkish cancer patients. Hence, the present study aimed to determine the demographic characteristics that affect the perceived social support in cancer patients undergoing chemotherapy in Turkey. **Patients and Methods:** This study was designed as a descriptive cross-sectional study. The sample included 423 adult cancer patients who admitted to the Outpatient Chemotherapy Unit of three hospitals in Turkey between March 2014 and August 2014. The data were collected through Demographic Characteristics Form and Cancer-Specific Social Support Scale (CPSSS). **Results:** Patients were between 19 and 85 years of age with a mean 51.75 years. Almost half of them (40.7%) were primary school graduates, 53.2% were female, 84.6% were married and 85.8% had children. It was found that the patients generally received a high score (127.86 ± 17.44) from the CPSSS scale. The highest scores were obtained on the Confidence Support sub dimension. It was revealed that women and married patients needed more confidence support and general social support ($P < 0.05$). Social support perceived by primary school graduates was statistically significant to a great extent ($P < 0.05$). In spite of the difference between the patients with metastasis and their perceived social support grade averages ($P > 0.05$), it was seen that patients with multiple children utilized more confidence support and general social support in social support reception ($P < 0.05$). **Conclusion:** The study showed that study participants received a high amount of social support. Age, gender, marital status, number of children, and educational status were determined to affect perceived social support. It is recommended to support the patients who do not receive sufficient social.

Keywords: *Cancer patient, demographic factors, outpatient chemotherapy, social support*

Introduction

Cancer is one of the most severe health problems of our age; it brings along fear, despair, guilt, abandonment, excruciating pain, and death. Accordingly, it leads to psychological imbalance in an individual's life.[1,2] Like many other countries, cancer is ranked as the second cause of death in Turkey.[3] The global cancer burden is estimated to have risen to 18.1 million new cases and cancer caused 9.6 million deaths in 2018.[4] Medical treatment alone is not adequate in cancer therapy. Cancer patients are affected in physical, social, emotional, psychological, and economical aspects. Therefore, their functional lives are limited and this limitation results in increased stress

Address for correspondence: Dr. S Arıcan, PhD, University of Health Sciences, İzmir Bozyaka Education and Research Hospital, İzmir, Turkey. E-mail: serap-yazici@hotmail.com

Access this article online

Quick Response Code:	
	Website: www.njcponline.com
	DOI: 10.4103/njcp.njcp_372_17

levels.[5-9] The social support provided by the family and friends of the patient is of critical importance in the fight against cancer.[8-12] Social support caters for the basic social needs of individuals such as compassion, attachment, self-esteem, and feelings of belonging to a group. It enhances an individual's capacity for stress management. Social support is an emotional and physical protection factor against diseases.[13,14] Social support is generally provided by family members, kith and kin and healthcare professionals (physicians, nurses, social services experts, psychologists). The patients can better adapt themselves to the disease as the received social support increases.[15] Isolation can be observed in case of social support inadequacy and the quality of the care will decrease in such cases.[16] In this respect, it is argued that existence of social support leads to a decrease in physical and psychological symptoms of cancer patients and increases their quality of life significantly,[10,17,18] helps patients tolerate side-effects of treatment[19] and decreases the rate of mortality caused by cancer.[16,20] Applebaum *et al.* reported thatcancer patients' life quality increased and their anxiety levels decreased when they received high level of social support.[21] A study conducted on cancer patients by Hodges and Winstanley found that social support provided cancer patients with a positive outlook, increased their wellness, and had a positive contribution to their recovery.[8]

Social support was found to have significant main effects on physical and mental quality of life and on mental health-related issues among male and female survivors.[22]. High levels of social support were associated with low levels of depression.[23] On the other hand, social support also affects the frequency of admission and referral to the hospital.

Patients who experienced insufficient social support asked for referrals, however, patients who experienced sufficient support had fewer requests for referral.[24]

Social support enables the enhancement of relationships between groups or individuals. When an effective patient-nurse relationship is established, supportive care is also delivered. A qualitative study revealed that supportive nursing improves relationships in which nurses play a key role in improving these relationships.[25]

A study emphasized that social support is extremely important for the procurement of psychological recovery and wellness of teenager cancer patients.[11] A study has revealed that social support given by families is a factor that increases patients' level of hopefulness.[26] Another study showed that social support makes it easier to adapt to trauma, lessens post-trauma reactions and

protects the patient from secondary traumas.[27] It is emphasized that patients who perceive that they do not get sufficient emotional and social support have negative feelings such as guilt, solitude, hopelessness and anger and that this situation has adverse effects on stress management.[28]

As stated in literature, cancer and its treatment affect an individual physically, psychologically, and socially. Social support protects the patient from negative results of stress, creates a positive effect on emotional and physical health and plays a protective role in stress management. Healthcare professionals must take steps towards maintaining and improving the wellness of cancer patients and develop a guideline. It is very important for cancer patients to develop a positive attitude towards the changes caused by cancer in their lives so that they can cope with the stress crated by cancer and related treatments.

The demographic parameters that affect social support are significant in cancer patients in developing countries. Studies conducted with patients with cancer in Iran indicate that female patients, for house workers and patients who live alone have higher support needs.[29] Also, the number of children is significantly related to social support.[23] The results of a study in Pakistan showed age of patients with breast cancer significantly correlated with social support.[30] A study in India found that patients with cancer in the age range of 40–59 tended to require more support compared to other age groups.[31] In studies conducted in Turkey, compared to male patients, female patients were found to perceive less social support from their families. Single patients perceived less social support compared to married patients.[32,33] Also educational level, state of employment and perceived economic status affect social support perceptions.[33]

In this context, it is clear that social support is an important factor which affects the treatment process of patients receiving cancer treatment. The perception of social support is also influenced by cultural factors. Although it is stated that patients' demographic characteristics affect social support perceptions, studies with large samples and multicenter outpatient studies are limited. The demographic data which affected social support perceptions of cancer patients living in Turkish society were addressed in multidimensional aspects.

PATIENTS AND METHODS

The population of the study was made up of 6754 cancer patients admitted to the Outpatient Chemotherapy Unit at two university hospitals and a Ministry of Health

hospital in two separate provinces in Turkey between March 15 and August 15, 2014.

Data collection instruments

The data were collected through Demographic Characteristics Form and Cancer-Specific Social Support Scale (CPSSS). The data were collected by face-to-face interviews. The forms were filled out by researchers who interviewed the patients in person.

Demographic Characteristics Form: It contains 26 forms prepared by the researchers with the help of literature. The questions are related to age, gender, educational status, marital status, occupation, social security, diagnosis, time of diagnosis, stage of illness, and treatments.

The Cancer-Specific Social Support Scale (CPSSS): This scale identifies the perceived social support of cancer patients. It was developed and tested for validity/reliability by Berrin Eylen (2002).[34] The scale contains totally 35 items, 13 of them are negative statements (items 4, 9, 13, 14, 21, 22, 26, 27, 29, 30, 31, 32, and 33) and 22 of them are positive statements. The rating is based on the 5-point Likert scale, in which points 5, 4, 3, 2, and 1 stand for "quite applicable to me," "applicable to me," "partly applicable to me," "not applicable to me" "not applicable to me at all," respectively. The scale has three subscales: confidence support, emotional support, information support. To calculate perceived support score, individual's score in the negative statements is reversed and then added to the total score in the positive statements. The social support provided by families as perceived by cancer patients was measured with a five-point scale in which higher scores on the scale reflect higher levels of perceived social support. The Cancer-Specific Social Support Scale was used in this study because it was first developed in Turkey and therefore it was considered to reflect the values of Turkish society. Cronbach alpha coefficient of original scale was 0.92. In this study Cronbach Alpha coefficient was found to be 0.83.

Ethical considerations

For the implementation of the research, written permission was received from the Ethical Committee of Scientific Research at Ege University Faculty of Nursing (07.02.2014/2014-14). Written permissions were taken from three hospitals (Pamukkale University Hospital, Ege University Hospital, Bozyaka Health Ministry Hospital) for conducting the study. The patients who wanted to take part in study voluntarily were verbally informed about the aims of study and were informed about the conditions in case they wanted to be excluded. In regards to vountary aspects of the

study, subjects provided verbal consent. Permission was received from Berrin Eylen, the developer of the scale, by email to use the CPSSS.

Data analysis

The data were analyzed by Ege University Department of Biostatistics and Medical Informatics using the SPSS version 21.0 (IBM SPSS Inc, Armonk, New York).

Descriptive data on patients were expressed as numbers, percentages, means, and standard deviations. Kruskal-Wallis and (KW) and Mann-Whitney-U tests were performed for variables that did not exhibit a normal distribution. One-way analysis of variance test and independent-sample *t*-test were performed for variables that exhibited a normal distribution. Level of significance was assumed to be. 05.

RESULTS

The mean age of patients was 51.75 (SD = 12.84, the youngest = 19, the oldest = 85). It was found that 40.7% of the participants were primary school graduates, 53.2% were female, 84.6% were married, 85,8% had children, only 20.1% worked, 36,6% were housewives and most had social security (92.9%, n = 393). Approximately two-thirds of them (71.9%, n = 304) considered their income status as "middle level". Nearly 50% (48.2%, n = 204) were members of nuclear families and most (30.7%, n = 130) had breast cancer. Most of the patients received chemotherapy at Pamukkale University Hospital (46.8%, n = 198). While 24.6% of the participants received chemotherapy, 40.0% had surgery and received chemotherapy. Only 25.8% of the patients had metastases and 34.8% had an accompanying disease. Very few patients reported that they did not receive information about their diseases [Table 1].

Most patients (88.7%, n = 375) reported that they received information about their illness and the relevant treatment, more than half of the patients (56.5%, n = 239) reported no problems doing their daily work and they were able to get help (62.9%, n = 266) during their daily chores. Almost all patients (94.3%, n = 399) were aware that their friends or relatives know about their diseases and 79.2% weren't worried about sharing information with friends and relatives. Most of the patients (73.3%, n = 310) reported receiving psychological and physiological support during the course of the disease and therapy and 62.3% of them received support from family members. Additionally, 31.2% suffered from side effects of chemotherapy (such as nausea, vomiting) and 45,9% had problems related to

Table 1: Socio-Demographic Characteristics of Respondents (*n*: 243)

Variables	*n*	Percentage
Age Range		
19-29 years	14	3.3
30-40 years	78	18.4
41-51 years	113	26.7
52-62 years	128	30.3
63 years and older	90	21.3
Level of Education		
Literate	28	6.6
Primary School	172	40.7
Middle School	63	14.9
High School	84	19.9
University	76	18.0
Gender		
Female	225	53.2
Male	198	46.8
Marital Status		
Married	358	84.6
Single	65	15.4
Do you have children?		
Yes	363	85.8
No	60	14.2
Number of Children		
No children	60	14.2
One Child	54	12.8
Two Children	166	39.2
Three Children	93	22.0
Four Children/more	50	11.8
Working Status		
Yes	85	20.1
No	338	79.9
Occupation		
Housewife	155	36.6
Worker	51	12.1
Retired	137	32.4
Officer	46	10.9
*Other	34	8.0
Income Level		
Good	70	16.5
Middle	304	71.9
Bad	49	11.6
Social Security		
Yes	393	92.9
No	30	7.1
Whom do you live with?		
Alone	12	2.8
With Spouse	144	34.0
Spouse and Children	204	48.2
**Other	63	14.9

Contd...

Table 1: Contd...

Variables	*n*	Percentage
Diagnosis of Cancer		
Breast	130	30.7
Colon	50	11.8
Lung	40	9.5
Prostate	32	7.6
Uterine	27	6.4
Bladder	25	5.9
***Other	119	28.1
Hospitals where patients receive chemotherapy	198	46.8
Pamukkale University Hospital	125	29.6
Bozyaka Health Ministry Hospital	100	23.6
Ege University Hospital		
Which treatments did you receive?		
Chemotherapy	104	24.6
Surgery and Radiotherapy	21	5.0
Surgery and Chemotherapy	169	40.0
Surgery, Radiotherapy and Chemotherapy	93	22.0
Radiotherapy and Chemotherapy	36	8.5
Is metastasis present?		
Yes	109	25.8
No	314	74.2
Do you have any other diseases?		
Yes	147	34.8
No	276	65.2
Have you received information about your illness and treatment?	375	88.7
Yes	48	11.3
No		
Do you have difficulty doing daily chores?		
Yes	184	43.5
No	239	56.5
Do you get help while undertaking your daily tasks?	266	62.9
Yes	157	37.1
No		
Do your friends or relatives know of your illness?	399	94.3
Yes	24	5.7
No		
Are you worried about your illness being known by other individuals?	88	20.8
Yes	335	
No		
Were you able to psychological or physiological support during your illness and treatment?	310	73.3
	113	26.7
Yes		
No		

Contd...

Table 1: Contd...

Variables	n	Percentage
Who did you get the most support from? (*n*=310)	193	62.3
Family members	81	26.1
Health care professionals	19	6.1
Friends	17	5.5
Patients with the same problem		
Are you suffering from side effects of chemotherapy?	132	31.2
Yes	291	68.8
No		
Are you having problems with your sexual life?	194	45.9
Yes	229	54.1
No		
Can you participate in social events?		
Yes	172	40.7
No	251	59.3
Can you find time for your hobbies?		
Yes	206	48.7
No	217	51.3
TOTAL	423	100.0

*Farmer, hairdresser, tailor, chauffeur, artisan, student, security guard, accountant, unemployed. **Mother, father, grandmother or father, brother or sister, parents, grandchildren. ***Pancreas, stomach, ALL, AML, Liver, testicle Hodgkin's lymphoma, myosarcoma, ovary, brain, esophagus, thyroid, throat

Table 2: Distribution of Mean Scores for Adult Cancer Patients Obtained From Cancer-Specific Social Support Scale (CPSSS) (*n*=423)

	Perceived Social Support Point Average	
Sub Dimensions of Scale	X±SS	Min - Max
Confidence Support	53,81±9,46	13-65
Emotional Support	42,23±7,11	21-60
Information Support	31,81±6,63	18-50
General CPSSS Score	127,86±17,44	63-175

sex life. It was identified that 59.3% of the patients did not participate in social activities and 51.3% could not find time for their hobbies [Table 1].

Table 2 presents the CPSSS. Total scores ranged from 63 to 175 with a mean value of 127,86 ± 17,44, indicating a high level of Social Support. The highest scores were obtained on the sub dimensions of Confidence Support and Emotional Support. "Confidence support" (53,81 ± 9,46) and "Emotional Support" (42,23 ± 7,11) were found to be the most important sources of support for cancer patients.

Table 3 presents the average distribution of points according to factors that may affect perceived social support. A significant difference was found between

CPSSS mean score and patients' age groups, education level, gender, marital status, whether they had children, number of their children, their work status, income level, diagnosis, whether they had information about their disease, whether they were concerned about others' knowing about their disease and the status of getting help ($p < 0.05$).

Patients in the advanced age group (63≥) were found to have higher perceived social support in confidence support ($P = 0.017$), knowledge support ($P = 0.02$) and social support dimensions ($P = 0.041$). Male patients, married patients, patients who did not work outside the home and patients with children were found to have high level of perceived social support only in confidence support and in general, while patients who graduated from primary school and patients with three or more children had high level of perceived social support in all sub-dimensions and in general ($P <.05$) high. The patients who were informed about the disease and its treatment were found to have higher social support ($P = 0.043$). Patients who were provided with information about their diseases and relevant treatments were found to have higher perceived social support ($P = 0.043$). Social support perceived by patients who were worried about others' knowledge of their diseases was found to be higher in the information support sub-dimension. Social support perceived by patients who received support during daily tasks was found to be higher in the sub-dimension of confidence support.

No significant differences were found between the score obtained from the CPSSS and the following: occupation ($P = 0.667$, F = 0.594), social security (P = 0.168, t = 1.407), Whom do you live with? (P = 0.269, KW = 2.625), Diagnosis (P = 0.074, KW = 5.201), Metastasis (P = 0.428, t = -.780), treatments that were received (P = 0.990, KW = 0.210), accompanying diseases (P = 0.761, t = -.304), whether they were provided with information about their diseases and treatment (P = 0.097, t = -1.663), whether they had difficulty undertaking daily chores (P = 0.985, t = 0.019), income level ($P = 0.386$, F = 0.954), whether their friends or relatives know of their disease (P = 0.214, MU = 0.210), whether they received psychological or physiological support during their disease and treatment? (P = 0.702, t = -.382), who they got the most support from (n = 310) (P = 0.619, KW = 0.958), whether they suffered from any side effects (P = 0.965, t = -.044), whether they experienced problems with their sexual lives (P = 0.600, t = 0.525), whether they participated in social events (P = 0.627, t = 0-.486) and whether they had time for their hobbies (P = 0.923, t = 0.097).

Table 3: The Distribution of Mean Scores According to Socio-demographic Factors that Affect Patients' Perceived Social Support (*n*=423)

| | *n* | Cancer-Specific Social Support Scale Mean Score | | | |
		Confidence Support X±SS	Emotional Support X±SS	Information Support X±SS	General CPSSS Score X±SS
Age Range					
19-29 Years	14	53.92±8.18	43.35±5.32	29.85±6.21	127.14±14.45
30-40 Years	78	52.97±10.40	40.74±6.35	30.47±5.03	124.19±15.80
41-51 Years	113	52.43±9.59	41.97±7.78	33.03±6.62	127.44±19.51
52-62 Years	128	53.69±9.13	41.92±6.08	31.34±6.52	126.96±16.42
63 Years and older	90	56.41±8.75	43.66±6.56	31.87±5.96	131.95±15.50
		P=0.017	*P*=0.065	*P*=0.028	*P*=0.041
		KW=12.113	KW=8.834	KW=10.905	KW=9.936
Education level					
Literate	28	54.53±7.33	40.25±5.68	32.10±5.59	126.89±13.00
Primary School	172	55.36±9.15	43.25±7.04	32.80±7.26	131.42±17.40
Middle School	63	54.90±8.59	43.46±7.72	32.96±7.26	131.33±17.83
High School	84	50.28±10.25	40.27±5.76	29.70±4.80	120.26±15.35
Universıty	76	53.02±9.73	41.27±5.88	30.19±5.44	124.50±15.76
		P=0.001	*P*=0.001	*P*=0.000	*P*=0.000
		KW=17.813	KW=19.619	KW=20.704	KW=33.77
Gender					
Female	225	52.60±9.83	41.87±6.92	31.38±6.07	125.85±17.42
Male	198	55.18±8.85	42.44±6.54	32.06±6.38	129.69±16.45
		P=0.005	*P*=0.382	*P*=0.265	*P*=0.020
		t = -2.847	*t* = -0.875	*t* = -1.115	*t* = -2.329
Marital status					
Married	358	54.56±8.79	42.30±6.55	31.70±6.11	128.56±16.05
Single	65	49.67±11.79	42.30±6.55	31.69±6.86	122.60±21.27
		P=0.002	*P*=0.294	*P*=0.992	*P*=0.034
		t=3.183	*t*=1.056	*t*:= 0.010	*t*:=2.153
Do you have children?					
Yes	363	54.55±8.77	42.43±6.52	31.85±6.25	128.85±16.14
No	60	49.28±12.02	40.35±7.78	30.73±5.97	120.36±20.50
		P=0.002	*P*=0.053	*P*=0.183	*P*=0 0.003
		t=3.259	*t*=1.964	*t*=1.344	*t*=3.053
Number of Children					
No children	60	49.28±12.02	40.35±7.78	30.73±5.97	120.36±20.50
One Child	54	53.16±8.90	41.87±6.35	32.53±6.45	127.57±16.44
Two Children	166	53.91±9.30	42.14±6.85	31.40±5.79	127.46±16.44
Three Children	93	55.96±7.81	42.24±5.56	31.03±6.56	129.24±14.99
Four Children and more	50	55.60±8.26	44.36±7.05	34.16±6.51	134.12±16.23
		P=0.000	*P*=0.044	*P*=0.019	*P*=0.001
		F=5.366	F=2.472	F=2.971	F=001
Do you work outside the home?					
Yes	85	51.45±10.21	40.96±7.47	31.54±5.29	123.96±17.62
No	338	54.40±9.18	42.43±6.52	31.73±6.44	128.57±16.82
		P=0.010	*P*=0.072	*P*=0.768	*P*=0.026
		t = -2.580	*t* = -2.421	*t* = -0.295	*t* = -2.176
Have you been informed about your illness and treatment?					
Yes	375	53.66±9.72	41.97±6.82	31.51±6.18	127.15±17.45
No	48	54.91±7.08	43.45±5.95	33.12±6.41	131.50±13.21

Contd...

	n	Table 3: Contd...			
		Cancer-Specific Social Support Scale Mean Score			
		Confidence Support X±SS	**Emotional Support** X±SS	**Information Support** X±SS	**General CPSSS Score** X±SS
		P=0.391	*P*=0.150	*P*=0.092	*P*=0.043
		t = -0.859	*t* = -1.441	*t* = -1.688	*t* = -2.059
Are you worried about your illness being known by other individuals?					
Yes	88	52.72±8.47	42.03±7.43	33.77±6.86	128.53±18.19
No	335	54.09±9.70	42.16±6.56	31.15±5.93	127.41±16.77
		P=0.228	*P*=0.869	*P*=0 0.001	*P*=0 0.586
		t = -1.207	*t* = -0.165	*t*=3.271	*t*=0.546
Do you get help while undertaking daily tasks?					
Yes	266	54.64±8.60	42.27±6.36	31.52±6.41	128.43±15.71
No	157	52.39±10.64	41.91±7.35	32.00±5.88	126.31±19.11
		P=0.018	*P*=0.603	*P*=447	*P*=0.216
		t=2.377	*t*=0.520	*t* = -0.762	*t*=1.240
TOTAL	423	53.81±9.46	42.13±6.74	31.69±6.22	127.65±17.06

DISCUSSION

It is known that perceived social support changes an individual's values and has significant effects on the emergence, prognosis and recovery of many physical and mental illnesses.[35]

Many patients with cancer or similar chronic illnesses resort to their own social support network and use various management methods of their own when they face stressful situations. In his study devoted to the perceived social support levels of cancer patients, Özyurt revealed that patients received social support mostly from their spouses, followed by their children and from their siblings and parents.[36] In this study, when patients were asked whether they received psychological or physiological support during their diseases, 73.3% (n = 310) of the patients responded in affirmative and reported that they got social support from their family members mostly (36,9%, n = 156), [Table 1]. Naseri and Taleghani found that cancer patients received maximum social support from their families, friends, and relatives. In this regard, the results of previous studies also indicated that patients received the maximum acceptable social support from family.[23] In the study conducted by Eylen to determine the social support level in cancer patients, the support received from families was found to be high.[34] Similar studies also reported that social support is mostly received from family members.[5,37,38]

The fact that cancer patients get the highest social support from family members that provide care is in line with the literature. For this reason, it is essential for nurses to guide family members towards supporting the patient.[9,39]

Family-centered social support programs where patients undergoing treatment can express their own thoughts and feelings are essential for gaining individual skills.

This study found that patients scored high on perceived social support. It was seen that the social support most perceived by the patients was confidence support while the social support least perceived by the patients was information support. In their study, Çalışkan *et al.* also found that the type of social support perceived the most by patients was confidence support whereas the least perceived social support type was information support.[40]

It was demonstrated that senior patients' confidence and information support sub-dimensions and their general perceived social support levels were higher. Senior patients stated that they felt more secure and had better information and general perceived support. A study found that while the problem-solving strategy use decreased with age, the need for social support increased.[36] In a similar study, however, it was explained that the elderly received less social support compared to the young.[37] In terms of the current study, senior patients' perceived social support level was determined to be high, however, the same applies to and is important for all age groups of cancer patients.

In the study conducted with breast cancer patients, it was found that perceived social support increased along with educational level.[34] Likewise, it was ascertained that the higher perceived social support mean scores were obtained by patients who were graduates of middle/high school or higher level of education.[33,40] The study by Costa-Requena *et al.* has shown that education level has no effect on the level of social support received.[35] Contrary to the literature, the findings of this study show that perceived social support of the patients who were

primary school graduates were statistically significant in all sub dimensions.

The study concluded that demographic characteristics of the patients affected perceived social support.[41] The sociodemographic characteristics of cancer patients are important in terms of understanding social support differences and evaluating and supporting the patients.[42]

It was found that the male patients that took part in the study had a good level of social support, particularly perceived confidence support. Similarly, it was observed that women received lower social support in the long run following the diagnosis compared to men.[35] The study by Paterson *et al*. showed that male patients with social support managed stress better, suffered from depression less and had increased quality of life.[43]

The married patients in the sample group stated that they felt more secure and received better social support. The type of the support that patients need can vary according to the individual, time, and circumstances. While single patients may benefit from emotional support, married patients with children can benefit from social support provided by neighbors. A study has shown that patients that are married for longer periods of time adapted to their situation better and that they received most of the support from their spouses.[44]

Literature points out that patients receive most of the support from their spouses and that spousal support is especially significant in fighting the disease, sharing responsibilities and dealing with the physiological/psychological problems that may arise.[39,40] A similar study revealed that single patients received social support mostly from family members and friends.[13] Leung *et al* found that single patients receiving chemotherapy faced with more psychological problems than married patients and that factor that caused the significant difference in Leung's study may be related to the fact that single patients had less social support compared to married patients.[45]

It was determined that patients with multiple children had higher levels of general perceived social support. A study found that cancer patients living with their children had a lower risk of mortality.[19] However, a similar study demonstrated that the number of children had no effect on perceived social support.[35]

It was observed in the study that whether others had knowledge of subjects' diagnoses did not affect their perceived support and when these patients wanted to get more information about their cases, they did. The findings revealed that the subjects could undertake their daily tasks easily even when they did not receive social support. It should also be kept in mind that family members, who are affected by this illness as much as the patients, are in need of social support as well.[35]

The fact that the sample of this study was composed of patients treated at the outpatient chemotherapy unit at three hospitals in two separate provinces in Turkey is the limitation of this study. Patients undergoing different cancer treatments (radiotherapy, brachytherapy, palliative, etc.) were not included in the study. There is a need for larger-scale and prospective studies for all patients who receive outpatient or long-term inpatient cancer treatment in hospitals to investigate social support status and factors affecting social support.

Conclusion

The cancer patients included in the sample of this study were found to have a high level of perceived social support. Factors such as age, gender, marital status, number of children, and educational status were determined to affect perceived social support. It was determined that perceived social support was high in married individuals, in males, in individuals with low level of education and in seniors. On the other hand, patients' disease and treatment status, working status, and economic factors were found to have no effect on perceived social support. Patients who do not live alone (living either with their spouses or with their children), patients with low level of educational backgrounds who receive sufficient information about their diseases and treatment, and individuals who can get support during their daily tasks were found to have higher perceived social support.

In this context, it is recommended to evaluate patient characteristics before providing support since sociodemographic characteristics of cancer patients influence the level of social support receival. It is recommended to raise the awareness of families and organize institutional education programs for them since they play key roles in providing social support. The long-term effects of social support should also be studied.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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