RESEARCH ARTICLE

Social Support and Quality of Life in Turkish Patients with Gynecologic Cancer

Evsen Nazik[1]*, Hakan Nazik[2], Funda Ozdemir[3], Selen Soydan[4]

Abstract

The aim of this study was to determine the level of social support and quality of life in Turkish patients with gynecologic cancer using a cross-sectional survey design. A total of 108 patients admitted to the gynecologic oncology clinic at a university hospital from September 2011 to January 2012 were included. Data were collected using patient information forms, the Multidimensional Scale of Perceived Social Support (MSPSS) and The Quality of Life-Cancer Survivors Instrument (QOL-CS). Average age was 54.5±10.8 years and it was determined that 65.7% of patients had ovarian cancer and 19.4% had cervical cancer. The total QOL-CS mean score was 5.59±1.10. Average score of total MSPSS was found to be 69.7±14.64. Comparing socio-demographic and clinical characteristics of patients and average scores of QOL-CS and MSPSS, it was found that there was not a statisticaly significant corelation (p>0.05). Statistically significant relation was found between the average scores of QOL-CS and MSPSS. These results showed that quality of life was moderate and perceived social support was high in Turkish patients with gynecologic cancer.

Keywords: Gynecologic cancer - quality of life - social support - Turkey

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Introduction

Cancer is a major disease burden worldwide and most people perceive it as a frightening and untreatable disease that implies death. Gynecologic cancers constitute a major part of the cancers observed in women (Turkey Health Statistics, 2012). The effects of gynecologic cancer on woman health are multidimensional. Disease and treatments about disease threatens not only life but also it can be perceived as a threat for reproductivity, sexuality, feminity. Furthermore it is told that gynecologic cancers and their treatment methods affect the quality of life negatively (Reis et al., 2006; Pinar et al., 2012; Srisuttayasathien and Khemapech, 2013).

Social support is effective on beginning, devolopment and time of many physical and psychological diseases. Social support allows the individual to overcome the stress he/she is experiencing in his/her life and to get through his/her problems with respect to the extent of dysfunction. It takes place like a tampon by reducing the perceived life events that causes stress and helping the patient on struggling for emotional tension. There has been studies on the effects of social support on quality of life in literature (Pinar et al., 2012; TopCu and Boluktas 2012; Farooqui et al., 2013; Thornton et al., 2013).

One of the aims of healthcare is to increase the power of patients to overcome their problems. Nurses should activate the social support systems of patients to help them overcoming the stress. If we focus on the important problems that occure because of negative effects of the gynaecologic cancer and treatment methods on quality of life, it will be more important to sign the facts that helps to increase the quality of life. This study is aimed to determine social support and quality of life for the patient with gynecologic cancer, and to investigate the relationship between social support and quality of life.

Materials and Methods

Design

This study used a cross-sectional survey design.

Setting and sample

The 108 patients having 3 months or more diagnosed who admitted to gynecologic oncology clinic at a university hospital from September 2011 to January 2012 and not having any comminication problem and who agreed to participate in study were included.

Instruments

The data were collected using patient information form, Multidimensional Scale of Perceived Social Support

*[1]Obstetric and Gynecologic Nursing, Department of Nursing, Adana Health School, Cukurova University, [2]Department of Obstetric and Gynecologic, Adana Numune Education Hospital, [3]Nursing Department, Ankara University Health Sciences Faculty, [4]Gynecologic Oncology Clinic, Balcali Hospital, Cukurova University, Adana, Turkey *For correspondence: eceevsen_61@hotmail.com*

and The Quality of Life-Cancer Survivors Instrument.

Patient information form: patient information form established under the guidance of literature and includes personal and disease related variables. Personal characteristics are composed of questions related to age, education status, occupation, monthly income level, marital status, number of children and type of family which showed in first chapter. The second chapter is formed with the variables of disease and these are clinical diagnosis, clinical stage, treatment and time of diagnosis.

Multidimensional scale of perceived social support (MSPSS): this survey was developed by Zimet and Dahlem (1988) and adapted to Turkish by Eker and Arkar (1995). The MSPSS was consisted in total of three sections and 12 questions and included questions about support coming from family (3rd, 4th, 8th, and 11th items), friends (6th, 7th, 9th, and 12th items), and special people 1st, 2nd, 5th, and 10th items). Each item is rated on a 7 point scale. There are no negative statements on this scale. The choices are scored as: "Completely agree: 7," "Mostly agree: 6," "Agree: 5," "Uncertain: 4," "Disagree: 3," "Mostly disagree: 2," and "Completely disagree: 1." High scores indicate high social support.

The quality of life-cancer survivors (QOL-CS) instrument: the QOL-CS was revised by Ferrell et al. (1995). The reliability and validity of the Turkish version of the QOL-CS was conducted in 2010 by Reis et al. (2010) Cronbach's alpha internal consistency level was found to be 0.97. The QOL-CS consists of 41 items that elicit QOL information on four subscales: physical well-being (8 items); psychological well-being, including cancer-related fears and distress (18 items); social well-being (8 items); and spiritual well-being (7 items). Participants rate each item 'based on your life at this time' on a 10-point scale with polar opposite phrases at either end (e.g., 'worst' or 'best'). Variant response items were transposed so that 10 always represented the best outcome and 0 represented the worst outcome.

Procedures

Formal permission was taken from the place where the study was carried out. Because the clinic chief's approval is enough to carry out the descriptive studies, the study was approved by the chief of Gynecologic-Oncology Clinic, of Balcali Hospital, Cukurova University. First of all, the patients included in the study were informed about the purpose of the study. They were also informed that the information collected on the issue would not be read by anybody apart from the researchers, and that they would be used for scientific purposes, and, in this way, their verbal permission was taken.

A face to-face interview method to administer the questionnaires by the researcher was used. If a patient was unable to complete the questionnaire, the investigator read the questionnaire items to the patient and recorded the answers. The time taken to complete the questionnaire was approximately 25 to 30 minutes. Disease-related characteristics of the patients were obtained from patients files.

Statistical analysis

The data were evaluated using SPSS 13.0. Percentage was used to evaluate the parameters of educational status, marital status, employment, economic status, family type, diagnosis, clinical stage, duration of diagnose, received treatment. Kruskal-Wallis variance analysis, Mann-Whitney U test and t test were applied to examine the difference between the mean score of quality of life and perceived social support that with regard to each patient's socio-demographic/ medical factors. Pearson's correlation analysis was applied to determine the relation between life quality scores and point means of perceived social support. Significance in all statistical analyses was defined as $p<0.05$.

Results

Average age of the patients was 54.45±10.77. It was found that 48.1% of patients were first-secondary (primary) education. 90.7% of patients were not working,

Table 1. QOL-CS scores of Patients with Gynecologic Cancer

Total QOL-CS score-group	Mean: X=5.59±1.10
Physical well-being-subscale	Mean: X=5.49±2.03
FFatigue	2.76±3.68
Appetite	4.12±3.22
Aches/pain	5.49±3.55
Sleep	5.10±3.36
Constipation	5.22±3.79
Nausea	5.87±3.81
Menstrual changes or fertility	7.54±4.11
Overall physical functioning	5.00±2.55
Psychological well-being-subscale	Mean: X=5.04±1.47
Coping	4.47±3.46
Self concept	5.67±3.36
Fear of second cancers	3.16±3.79
Usefulness with yourself	5.38±2.10
Fear of cancer recurrence	2.76±3.68
Satisfaction with life	6.09±3.03
Fear of cancer spreading	2.42±3.57
Goodness of QOL	5.19±2.53
Diagnostic tests in the future	5.28±3.83
Treatment distress	3.66±3.51
Happiness	5.40±3.50
Initial distress from diagnosis	4.71±3.83
Feeling in control	5.31±3.12
Concentration/remembering	6.17±3.15
Appearance changes	4.50±3.59
Diagnosis	4.46±3.95
Time after treatment	6.59±3.69
Anxiety	4.25±3.53
Social well-being-subscale	Mean: X=5.52±1.71
Support from others	6.52±3.71
Family distress	2.50±3.33
Feeling isolated	5.99±3.81
Sexuality	5.25±4.56
Personal relationships	6.09±3.59
Employment	6.31±4.26
Home activities	3.08±3.64
Financial burden	3.47±3.58
Spiritual well-being-subscale	Mean: X=6.32±1.47
Importance of spiritual activity	9.13±2.05
Positive changes	3.69±3.62
Importance of religious activity	4.50±4.13
Uncertainty	5.06±3.75
Life purpose	7.97±2.71
Spiritual change	6.14±3.95
Sense of purpose	7.81±2.61

77.8% were married. 73.1% patients had lived in nuclear family, 55.6% had poor incomes (income <expenditure) and 51.9% were living at city centers. Of the patients 10.2% had not children, 50.0% was found to have 4 or more children.

It was determined that 65.7% of patients had ovarian cancer, 19.4% had cervical cancer and 34.3% of them were in stage 2.46.3% of patients were diagnosed of cancer more than 1years and 62.0% were received surgery+chemotherapy treatment.

The total overall quality of life mean score is 5.59±1.10. The spiritual sub-scale (6.32±1.47) and the social sub-scale (5.52±1.71) scores rank highest, followed by the physical sub-scale (5.49±2.03) and the psychological sub-scale (5.04±1.47) (Table 1).

The physical symptoms (items) with the highest scores on the QOL-CS were menstrual changes or fertility (7.54±4.11) and nausea (5.87±3.81). The physical symptoms (items) with the lowest scores on the QOL-CS was fatigue (2.76±3.68). The psychological well-being items with the highest scores on the QOL-CS were time after treatment (6.59±3.69) and concentration/ remembering (6.17±3.15). The lowest scores on the psychological well-being sub-scale of the QOL-CS were fear of cancer spreading (2.42±3.57), fear of cancer recurrence (2.76±3.68), fear of second cancers (3.16±3.79).

On the social well-being subscale, support from others (6.52±3.71) were the highest rated aspects of womens' social well-being. Family distress had the lowest mean score (2.50±3.33) compared to all other items in this domain.

The spiritual well-being items with the highest scores on the QOL-CS were time Importance of spiritual activity (9.13±2.05) and life purpose (7.97±2.71). The lowest score on the spiritual well-being sub-scale of the QOL-CS was positive changes (3.69±3.62).

When distribution of patients by average scores of MSPSS, it was found that the average score of Family support subscale was 24.88±4.79, average score of Friend support subscale was 20.62±7.15, average score of Special person support subscale was 24.14±5.08. Average score of total MSPSS was found to be 69.65±14.64. (Table 2).

The data concerning the comparison between the socio-demographics and disease characteristics of the sample with their quality of life and social support levels are provided in Table 3.

When the QOL-CS scale scores are examined according to education situation in the patient with gynecologic cancers, Physical well-being subscale scores were lower than other QOL-CS subscale in the all education groups. When the quality of life was compared with the marital status, Physical well-being subscale scores were lower than other QOL-CS subscale in the all marital status groups. QOL-CS total score is lower in the unmarried patients (4.47±0.90) than married and divorced patients.

Table 2. MSPSS Scores of Patients with Gynecologic Cancer

PMSS	Scale		Research		X±SD
	Min	Max	Min	Max	
Family support	4	28	4	28	24.88±4.79
Friend support	4	28	4	28	20.62±7.15
Special person support	4	28	5	28	24.14±5.08
Total	12	84	13	84	69.65±14.64

Table 3. Comparison of QOL-CS and MSPSS Scores Related To Socio Demographic And Disease Characteristics Of Patients With Gynecologic Cancer

Characteristics		S	%	Physical well-being X±SD	Psychologica l well-being X±SD	Social well-being X±SD	Spiritual well-being X±SD	Total QOL-CS score X±SD	Total MSPSS X±SD
Education	Non-Literate	38	35.2	4.73±1.64	5.39±1.37	5.46±2.02	6.13±1.68	5.40±1.19	66.47±16.08
(df=2)	Literate	13	12.0	4.36±2.42	6.03±1.17	5.78±2.60	6.28±1.20	5.70±1.02	68.53±12.21
	Primary school	52	48.1	4.37±1.81	5.45±1.53	5.38±2.32	6.31±1.72	5.37±1.39	71.53±14.18
	High school	5	4.6	4.37±2.96	6.42±0.71	5.70±2.29	7.71±1.46	6.10±1.12	77.20±10.42
				KW=0.404	KW=1.577	KW=0.330	KW=0.509	KW=0.527	KW=3.191
Marital Status	Married	84	77.8	4.62±1.91	5.59±1.45	5.64±2.37	6.44±1.67	5.56±1.35	70.78±14.01
(df=2)	Unmarried	3	2.8	1.75±2.22	5.35±1.74	4.08±0.83	5.76±0.35	4.47±0.90	70.00±10.00
	Divorced	21	19.4	4.38±1.38	5.37±1.28	5.00±1.57	5.83±1.62	5.19±0.84	65.09±17.14
				KW=4.365	KW=0.298	KW=2.819	KW=3.844	KW=4.092	KW=2.581
Diagnosis	Overian ca	71	65.7	4.62±1.92	5.47±1.51	5.51±2.28	6.33±1.68	5.46±1.33	70.52±13.05
(df=2)	Cervix ca	21	19.4	4.41±1.62	5.71±1.15	5.83±2.10	6.52±1.48	5.62±1.08	70.81±11.82
	Endometrial ca	16	14.8	4.05±1.98	5.66±1.37	4.83±2.15	5.96±1.80	5.24±1.26	64.31±22.63
				KW=1.189	KW=0.517	KW=2.747	KW=2.246	KW=0.515	KW=0.268
Clinical stage	I	26	24.1	4.65±1.70	5.55±1.19	5.65±2.11	6.46±1.63	5.55±0.98	72.53±9.51
(df=3)	II	37	34.3	4.30±2.02	5.37±1.66	5.13±2.05	5.97±1.79	5.21±1.46	70.62±15.15
	III	36	33.3	4.50±1.94	5.74±1.41	5.54±2.53	6.55±1.56	5.60±1.30	65.19±17.07
	IV	9	8.3	4.81±1.55	5.46±1.02	6.11±2.06	6.26±1.47	5.60±1.06	75.22±10.89
				KW=0.683	KW=0.472	KW=1.287	KW=2.009	KW=1.041	KW=5.331
Type of treatment	Surgery	7	6.5	4.57 ±1.05	5.20±1.33	4.43±1.74	6.00±1.37	5.07±0.78	74.86±6.28
(df=3)	Chemotherapy	18	16.7	5.33±1.69	5.74±1.36	6.77±2.51	7.06±1.65	6.09±1.19	71.00±18.32
	Radiotherapy	16	14.8	4.74±1.94	5.86±1.16	5.87±1.72	6.53±1.39	5.76±0.93	66.44±18.87
	Surgery+Chemotherapy	67	62.0	4.21±1.93	5.46±1.51	5.14±2.18	6.09±1.70	5.26±1.35	69.52±13.06
				KW=4.541	KW=1.225	KW=10.218	KW=4.720	KW=6.332	KW=2.062
Duration of diagnosis	3–12 months	58	53.7	4.50±1.84	5.36±1.44	5.58±2.20	6.43±1.70	5.42±1.31	69.74±14.25
(df=106)	>13 month	50	46.3	4.50±1.93	5.76±1.39	5.35±2.27	6.17±1.61	5.50±1.23	69.56±15.23
				t=-0.020	t=-1.438	t=0.521	t=0.795	t=-0.352	t=0.064

*p value>0.05

Table 4. Correlation Between Quality of Life and Social Support

QOL-CS	MSPSS							
	Family support		Friend support		Special person support		Total	
	r	p	r	p	r	p	r	p
Physical well-being	0.087	>0.05	0.710	>0.05	0.012	>0.05	0.067	>0.05
Psychological well-being	0.071	>0.05	0.124	>0.05	0.256	<0.05	0.173	>0.05
Social well-being	0.232	<0.05	0.0278	<0.05	0.242	<0.05	0.295	<0.01
Spiritual well-being	0.394	<0.01	0.393	<0.01	0.339	<0.01	0.438	<0.01
Total	0.284	<0.01	0.312	<0.01	0.297	<0.01	0.348	<0.01

When the quality of life was compared with the disease's diagnosis (over cancer, cervix cancer, endometrial cancer) physical well-being subscale scores were lower than other QOL-CS subscale in the all diagnosis. In the QOL-CS subscales, It was found that spiritual well-being score of patients with over and cervix ca (respectively 6.33±1.68, 6.52±1.48) was higher than other QOL-CS subscales. The education situation, marital status, disease diagnosis, clinical stage, duration of diagnosis were not statistically affect their life quality ($p>0.05$). Type of treatment was also associated with significant differences with respect to social well-being subscales ($p<0.05$).

When the total MSPSS scores are examined according to socio-demographics and disease characteristics in the patient with gynecologic cancers, It was found that total MSPSS scores were higher in the patients who were high school (77.20±10.42), married (70.78±14.01), cervix ca (70.81±11.82), stage IV (75.22±10.89), surgery as type of treatment (74.86±6.28). The education situation, marital status, diagnosis, clinical stage, type of treatment, duration of diagnosis were not statistically affect social support of patients ($p>0.05$).

There was not correlation between the perceived social support from the family, friend and special person and the physical well-being sub scale of quality of life ($r=0.087$ $p>0.05$, $r=0.071$ $p>0.05$, $r=0.012$ $p>0.05$). There was correlation between the perceived social support from the family, friend and special person support with spiritual well-being and social well-being subscale of quality of life. Statistically significant relation was found between the average scores of total QOL-CS and total MSPSS ($r=0.348$ $p<0.01$) (Table 4).

Discussion

When the patients' quality of life level was evaluated, the total quality of life score was determined to be moderate level. In Ozaras and Ozyurda' study (2010), when the dispersion according to scale scores of case and control group who participated to the research is examined, the life quality of case group with gynecological cancer is significantly lower than control group without gynecological cancer. In a study by Reis et al. (2010), the total quality of life score was determined to be moderate low (4.83±1.09). In a conducted study by using the EORTC QLQ-C30 with patients diagnosed with gynecologic cancer, quality of life was determined to be low (51.54±22.20) (Pinar et al., 2008).

When the sub-dimensions of the quality of life scale were evaluated, the patients' physical well-being was found to be moderate level. Fatique and appetite negatively affected the physical well-being. In a study by Deshields et al. (2011), the patients' physical well-being was found to be low and patients reported that a lack of energy, difficulty sleeping and pain were the common complaints. In a study by Nazik et al. (2013), the patients with gynecologic cancer most frequently reported symptoms fatique, loss of well-being, pain, nausea and appetite. Akin and Durna's study (2013), patients with cancer most frequently reported experiencing tiredness, loss of well-being, anxiety, drowsiness, appetite changes, depression, pain and nausea. In general, patients with cancer reported that they had numerous symptoms and significant impairments in physical well-being (Deshields et al., 2011; Abu-Saad Huijer et al., 2012).

The patients' Psychological well-being and Social well-being was determined to be moderate level in this study. The lowest scores on the psychological well-being sub-scale of the QOL-CS were fear of cancer spreading (2.42±3.57), fear of cancer recurrence (2.76±3.68), fear of second cancers (3.16±3.79). In a study by Reis et al. (2010), the most seriously affected areas of psychological well-being were fear of recurrence and spread of the cancer, development of a second cancer. According to the findings of Reis et al. (2010), psychological well-being was the most affected area. In a study, mean score on the emotional well-being sub scale was slightly lower than normative data for women in the general population (Gill et al., 2007). In a study by Miller et al. (2003), 57% of the patients reported that they needed help while dealing with emotional problems.

In this study, the patients' troubles with their family and financial burden negatively affected the social well-being. Dow and Melancon (1997) and Reis et al. (2010), had similar results in the patient group that they evaluated according to the same scale and found that the one of the most important problems affecting the social well-being was familial stress.

The patients' Spiritual well-being was determined to be moderately high (6.32±1.47). In a study by Reis et al. (2010) study group, it was determined that the patients' spiritual well-being was at a moderate level (5.88±1.65). In this study, when the sub-dimensions of the quality of life scale were evaluated, the patients' spiritual well-being mean score was found to be the highest mean score. Because; praying, visiting mosque, attending religious meetings/institutions, and having positive thoughts are quite effective in increasing the patients' spiritual well-being. This applications are not surprising in Turkey, where an estimated 99% of people are Muslims, who pray and believe that whatever happens comes from God. Spiritual strategies may even make patients feel better.

In this study, MSPSS total score were high and it was found that the average score of perceived social support from family and special person for patients was higher than the perceived social support from friend. Similar findings were reported in other studies. In a study by Pinar

et al. (2008), participants reported a higher than average amount of perceived support with the support typically coming from family. In Akyuz et al. (2008) study, many women stated that they received the most support from their partner, mother, daughters, and friends during the treatment. Tan and Karabulutlu, specified that the social support was higher which had taken support from the cancer patients' families (Tan and Karabulutlu, 2005).

In the study, no significant difference was found between QOL-CS and MSPSS scores with socio demographic and disease characteristics of patients with gynecologic cancer. Tahmasebi et al. (2007) study, no significant difference was found between the average scores of quality of life of women with gynecologic cancer by their marital status and education. Mirabeau-Beale et al. (2009) reported no difference in overall quality of life between women with early and advanced stage over ca.

In the study, it was found that the quality of life and social support increase when the education level is high. According to the available literature, there is a same results about our findings (Dedeli et al., 2008). In Pinar et al. study (2012), it was found that the MSPSS scores of participants who had a high school diploma or a higher degree (67.55±17.03) were higher than those of the graduates of basic education school (57.71±17.91). In this study; it was found that the social support was the highest among married patients. In Pinar et al. (2012) study and Ozkan and Ogce study (2008), MSPSS scores were high for participants who had a child and living with a spouse. In this study; it was found that the social support was the highest in stage I and stage IV. In a study performed by Ozkan and Ogce (2008), MSPSS scores were the highest in women with breast cancer who were in stage I and stage IV.

Statistically significant relation was found between the average scores of QOL-CS and MSPSS in the study. Pinar et al study, it was found that the type of perceived social support by the patients with gynecologic cancer had significant effect on quality of life. In other studies, It was found that general wellness status decreased as social support

In conclusion, the results of this study are important for documenting the life quality ans social support of gynecological cancer patients. We observed that the quality of life of patients diagnosed with gynecological cancer is determined to be moderately level and MSPSS total score were high. We found relation between quality of life and social support. According to these results, it is recommended that the nurses/physicians have an important role in providing social support to the patients and to their families and increasing quality of life, especially in the areas of nutrition and physical activity (Mohammadi et al., 2013; Moon et al., 2013).

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