

## Original Article

## Care Burden And Quality of Life of Family Members Caring for Cancer Outpatients

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### Abstract

**Background:** Today, most cancer treatment is given in outpatient treatment centers. In this process, family members who are responsible for the primary care of the patient have difficulty coping with the side effects of the disease and the treatment. This can change the reactions of family members to care giving, affecting the physical and psychological health of family members.

**Aim:** This study has been carried to determine the relationship between caregiving burden and quality of life (QOL) of family caregivers of outpatients receiving chemotherapy.

**Method:** This descriptive and cross-sectional study was carried out 120 patients' family caregivers applying to the outpatient center of university to receive chemotherapy. The data were collected through "Personal Information Form", "Caregiver's Stress Index", "Cancer Patients' Caregiver Family Members' Life Quality Scale (CQOLC)" and by the researchers.

**Result:** It has been determined that the family caregivers being female, having a low level of education, having a job, having lower incomes than their expenses, giving care for their spouses and giving care 21 hours and over daily have the worst QOL. All the family caregivers giving care reported that they live psychological distress while looking after the patient. Due to chemotherapy, all the family members providing care stated to have difficulties while handling the side effects occurred in patients. It was found that 30.8% of the family members could not cope with nausea, 29.1% with fatigue, 24.2% with loss of appetite, and 19.2% with vomiting.

**Conclusion:** By reducing the maintenance burden of family member caregivers, it can be considered that the QOL of both family members and patients may increase.

**Key word:** Chemotherapy; family caregiver; nurses; outpatients; quality of life

### Introduction

Globally, cancer constitutes 70% of all disease diagnosis and it is estimated to be in the first rank within all diagnoses in the last five years (Rowland, 2008). In 2018, an estimated 1.735.350 new cases of cancer will be diagnosed in the United States and approximately 600.000 people will die from the disease (NCI). In Turkey, cancer is the second leading cause of death. According to data of the Turkish Ministry of Health, 103.070 men and 71.233 women were diagnosed with cancer in 2015. The condition has chronic symptomatology, long treatment duration with serious side effects that can affect

the entire life of individuals and families. Cancer patients experience symptoms affecting significantly their daily activities, changes in physical appearance, present with significant psychological problems and loss of status in family and social life (Caley and Jones 2012; Nijboer et al. 1998; Rowland 2008). During both the diagnosis and treatment phases, family members accompanying the patient may also be affected by this process.

The care for cancer patients in Turkey is usually provided by a first-degree relative such as a spouse or parents at home. Although there may be many benefits for caring for a patient at home,

this might have a negative impact on the providers. Under this light, family members staying at home with the patient, while dealing with the patient's psychological condition and maintenance requirements also may cope with the side effects of treatment. Family members often do not know how to deal with these symptoms (Friðriksdóttir et al. 2011; McCarthy 2011; Pasacreta et al. 2000). This situation often causes additional stress in caregivers and may be a reason for further bio-psycho-social problems. All the above attribute to caregiver experiencing high levels of daily stress, also known as 'care burden' (Kasuya et al., 2000).

Due to the high responsibility involved in providing daily care, serious physical or psycho-social complications such as insomnia, change in appetite, headache, muscle pain, cardiovascular disorders, oversensitivity, stress, changes in interpersonal relationships can be noted on family members (Kasuya et al., 2000; Stenberg, Ruland and Miaskowski 2010; Toseland, Smith and McCallion 2001; Ugur and Fadiloglu 2010 ). These effects which derive from providing daily care, increase over time and change patients' and their families' lifestyles. Under this light, family members think that they don't have control over their lives and ultimately their quality of life (QOL) is reduced. In the review of Kitrungrrote and Cohen (2006) on QOL of caregiver family members, it was determined that those who have loss of physical strength due to the care responsibility, also present with high levels of stress, sadness and despair. Furthermore, those having difficulty in coping with such symptoms had a significant reduction in their QOL.

Nayak et al. (2014) found that care- giving family members also had financial difficulties, often had to quit their jobs and their social relations were negatively affected due to strenuous care giving responsibilities. Consequently, this situation affected their QOL. These difficulties that caregiver family members live increase their care burdens and reduces the QOL overall.

### **Aim**

The aim of this study was to determine the relationship between caregiving burden and quality of life (QOL) of family caregivers whose relatives are chemotherapy outpatients.

### **Materials and Methods**

The target population was 450 cancer patients who have been receiving treatment at the Mersin University Health Research and Practice Center between February-April 2013 as outpatients. The sample of this study consisted of the relatives of 120 individuals out of this patient group. The 120 family caregivers met the criteria for an adequate sample size for power analysis ( $p < 0.05$  significance level and 95% power). All participants provided informed consent while anonymity and confidentiality were secured.

Inclusion criteria to partake to this study were as follows:

- *to be the primary family caregiver,*
- *to be over 18 years old,*
- *to provide informed consent to participate in the study,*
- *to care for a relative who has been diagnosed with cancer at least three months prior to any care given,*
- *for the patient to be receiving chemotherapy for at least the second-time,*
- *caregiver's cognitive and mental health level to be adequate in order to answer the survey forms.*

Data were collected via the "Personal Information Form", "Caregiver's Stress Index (CSI)", "Cancer Patients' Caregiver Family Members' Life Quality Scale (CQOLC)". Face to face interviews were used in a private room in the outpatient's department and each session lasted for 30 minutes.

*Personal Information Form:* There were 10 questions in personal information form related to socio-demographic characteristics (the age, gender, education, occupation, place of residence of caregivers, with whom they live) and characteristics relating care giving process (degree of relatives, care duration, the average daily care giving time, the issues forcing while giving care).

*Caregiver's Stress Scale (CSI):* CSI was developed in 1983 by Robinson to measure the maintenance burden of caregivers and in Turkey, the scale's reliability and validity was studied by Ugur and Fadiloglu (2010). The scale consists of 13 items. The scale has no sub dimensions. The items are answered in the form "yes" or "no". If answer is 'Yes', (1) point is given, if "No" (0). At the same time every 'yes' answer indicate

what caregivers need in that area. In CSI, there is at least one item on areas that can potentially create stress on caregivers regarding their financial, physical, social and emotional status. In case results are seven points and over, individuals are under intense stress (Ugur ve Fadiloglu 2010).

*Cancer Patients' Caregiver Family Members' Life Quality Scale (CQOLC)* The scale was developed to assess the quality of life of cancer patients by Ferrell and Grant and then it has been adapted for the purpose of measuring the CQOLC of family members. The validity and reliability study of the scale has been calculated by Okcin and Karadakovan (2012) and was found to be satisfactory. CQOLC is composed of 31 items and four subscales. "Psychological and Spiritual Health Status (pshs)" subscales consists of 11 items, "Physical Health Status (phs)" subscale consists of 9 items, "Diagnostic Approach Status (das)" subscale 7 items, and "Support and Economic Impact Status (seis)" subscale consists of 4 items. Each question in was scored on a 10-point scale: 1 corresponding to the worst and 10 corresponding to the best scenario. The scale can be interpreted on the basis of the total and subscale scores with the high score indicating that the quality of life is high. In Okcin and Karadakovan (2012), study, the "Psychological and Spiritual Health Status" subscale had a Cronbach Alpha value of 0.73; Physical Health Status subscale was 0.81, Diagnostic Approach Status was 0.69, and Support and Economic Impact Status subscale was 0.35.

**Data Analysis:** Data obtained from this study were analyzed using Statistical Package for Social Science (SPSS) software version 15.0. Data were analyzed and presented via descriptive methods such as frequency, percentage, average and standard deviation. One-Sample Kolmogorov-Smirnow test and Mann-Whitney U test were used in comparing the two groups without normal distribution. Those with normal distribution were analyzed with the Student t test. In comparison of points of more than two groups, those who had not normal distribution were evaluated with Kruskal-Wallis test and those with normal distribution with the ANOVA test. Statistical significance level was set to  $p < 0.05$ .

**Ethical Consideration:** Prior to data collection, approval by the Clinical Studies Ethics

Committee (12.11.2012-338) of Mersin University Medical School in Mersin was sought and secured. The study aims and objectives were explained to patient relatives who complied with the inclusion criteria, by emphasizing the volunteer basis on which the invitation to partake was given.

## Results

The sample characteristics of the caregivers participating in this study are as follows: Mean age is  $42 \pm 13$  years, the age range 18-74, and 67% are women, 33% have high school graduates, 66% live with their spouse and children, 72% are married, 78% have also to look after someone else, 72% live in the city and 57% have less revenues than expenses.

Caregiver family members' CSS average was  $17.14 \pm 2.30$ . QOL subscale scores of caregivers; psychological and spiritual health status (pshs) average was  $53 \pm 4.41$ ; physical health status (phs) average was  $34.20 \pm 16.77$ , diagnostic approach state (das) average was  $43.03 \pm 8.15$  and support economic impact status (seis) average was  $16.13 \pm 8.72$ .

It was also noticed that the QOL scale points of female caregivers, those with low educational level ( $p < 0.05$ ), the singles ( $p < 0.05$ ), working ones ( $p < 0.05$ ), those having less revenue than expenses ( $p < 0.05$ ) and those having responsibility for caring someone else were lower.

For family members of the sample who were in charge of a child (29.5%), two children (50%) and in charge of 3-5 children (20.6%) only the CQOLC subscale was found statistically significant ( $p < 0.05$ ).

Cancer Patients' Caregiver Family Members' Life Quality Scale (CQOLC) score average of caregiver to the spouse was found lower than those caregivers to their mother, father or children ( $p < 0.05$ ). In terms of daily care duration, the QOL average score of family members giving care between 1-10 hours per day was the highest but the average quality of life score of those giving care 21 hours and over per day was the lowest. QOL score of caregivers who received support while providing care was higher than those who did not receive support and the difference between them was found to be statistically significant ( $p < 0.05$ ). It was also found that the duration of care given did not

affect caregivers' stress status and QOL ( $p > 0,05$ ).

Stress scale average scores of family members that face financial difficulties, changes in family relations and social relations because of the care giving responsibilities was found lower than those without such problems. Furthermore, the difference between them was found to be statistically significant ( $p < 0,05$ ). CQOLC average scores of those facing financial problems and changes in family and social relations was found lower than those without ( $p < 0,05$ ).

All of the family members providing care reported that they have been experiencing psychological distress while looking after the patients. 34.5% of the family members stated that they had a tendency to cry, 32.8% had stress, 26.6% unhappiness and 23.3% experienced despair.

Due to the chemotherapy treatment, all family members providing care stated to have difficulties while handling the side effects affecting the patients. It was also noticed that 30.8% of the family members could not cope with nausea, 29.1% with fatigue, 24.2% with loss of appetite, and 19.2% with vomiting.

## Discussion

In this study, it was determined that almost all of the caregivers are female, with secondary education level, the majority does not have a job and spend over 11 hours on a daily basis with the patient. In this light, similar studies found that female caregivers, those with low levels of education and without a job, those caring for first degree relatives who spend more time with patients experience a heavy care burden and have a worse QOL (Friðriksdóttir et al.2011; McCarthy 2011; Pasacreta et al.2000; Kim et al.2007; Wells et al. 2009; Kim and Spillers, 2010).

In parallel to our study, findings from Kim et al (2007) suggest that female caregivers experience more stress, are less supported and have lower QOL than male caregivers. Yet., more studies on this subject, it was determined that female caregivers experience the care burden more than male caregivers (Friðriksdóttir et al.2001; Mosher et al.2016; Wells et al.2009).

The perspective under which care responsibility is the duty of women in our culture may increase the burden of care for Turkish women. Since

women are mainly concerned with family matters, have more sense of care and nourishment and do not have a large place in the world of business, they can be considered in contemporary Turkey, to be more suitable for care provision.

In our study, it was also found that as the level of education increases, it determines that caregivers' psychological, physical, psychological and spiritual dimensions of health status and their QOL scores increase. Education status has been found not to affect the state of stress of caregivers. Kim and Spillers (2010) determined that, family members with low education level have more psychological distress while giving care. Nijboer et al (1999) found that caregivers with high level of education have higher self-esteem and coping mechanisms. Overall, it can be argued that family members with higher levels of education, make better use of the means to access to information, ability to use the information obtained and coping mechanisms so they have less care burden and better QOL.

We also found that working family members' physical and psychological health subscale mean scores were lower than the average score of unemployed family members. In a study conducted by Kim and Spillers (2010) it was found that physical and mental health of family members with high economic level are significantly better.

In our study, the fact of unemployment of the majority of family members may explain that their expenses are the more than their income. Because the cancer diagnosis and treatment costs are too much, it can bring economic burden on the family members providing care. The studies were found that caregivers having low socioeconomic status have more maintenance burden (Akinand Durna, 2013; Cal et al. 2017; Friðriksdóttir et al. 2001; Nayak et al. 2014; Stenberg et al.2010).

In our study, 38.3% of caregivers provide care to their spouse, 24.2% to their mother, 15.8% to their father. Spouse caregivers of physical health, psychological, spiritual health, support and the economic impression situation sub dimension and QOL mean scores were found lower than those providing care for their mother, father or child. In studies conducted, similar to our study, most of the caregivers are the first-degree relatives of the patients such as spouse, mother, child, etc. (Akin and Durna, 2013; Mosher et

al.,2016; Okcin and Karadakovan , 2012; Stenberg et al., 2010; Ugur and Fadiloglu,2010; YehP-M and Wierenga, 2009). It was found that caregiver being the spouse of the patient affects the QOL by 8%. In the same study, it was determined that caregivers being the children of the patient financial distress subscale scores are higher (Turkoglu and Kilic,2012).

It can be considered that caregivers in spouse and mother position may experience more the burden of maintenance since they spend more time with patients, try to cope with the chemotherapy symptoms and have relations with the patients.

In our study, 28.3% of the family members have been providing care during 3-12 months, 24.2% of them for 13-24 months, 26.7% of them for 25-36 months, and 20.8% of them for more than 37 months. In the studies conducted, family members have been providing care for their patients mostly for 3-12 months ( Friðriksdóttir et al.,2001; Turkoglu and Kilic,2012; Ugur and Fadiloglu,2010). Kim and Spillers (2010) besides our study findings, found that family members, two years after starting to provide care have less stress, are better spirituality and better at coping with the treatment of the disease. Caregivers' care burden score who start newly to providing care is lower than the others and their QOL scores are higher than the long-time caregivers (Turkoglu and Kilic,2012).

In our study, 37.5% of family members have been providing care for 21 hours and more, 34.2% between 11-20 hours, and 28.3% between 1-10 hours. In a study conducted it was specified that the average daily maintenance time is to be eight hours (Nijboer et al.1999) In another study, it was stated that 22.4% of family members have been providing care for 1-6 hours, 31.7% for 7-12 hours and 18.8% between 19-24 hours ( Okcin and Karadakovan 2012).

Tang and Li (2008) determined in their study that 43.5% of patient relatives have been providing care for 17-24 hours per day during 5.5 months on average, 39.5% of them have been continuously helping the house works, and 61.7% of them have performed the patient transport. While care giving duration in chronic diseases such as cancer lengthens, it is thought that caregivers may be faced with several problems. While maintenance time is increasing, the time left to oneself by the caregiver is decreasing, and they may experience symptoms such as social isolation and fatigue.

In parallel with our study findings, in studies conducted it was found that family members received support while providing care have less maintenance burden, and their psychological health is better than those without receiving support ( Kim and Spillers 2010; Tang and Li 2008; YehP-M and Wierenga 2009). In another study, it was determined that caregivers receiving support from the other members of the family can spare the time for themselves therefore, their health status are better and depression levels are less(Tang and Li, 2008). Tsigaropoulos et al (2009) determined that 80.3% of family members receive psychological support when they experience the negative effects of care giving, 13.2% of them receive support reluctantly and 6.6% of them don't have any support.

In our study, it was determined that 66.7% of caregiver family members experience changes in family relationships because of care giving responsibilities. In parallel to our study findings, in studies conducted, it was found that family relationships affect adversely because of the care giving responsibility (Kasuya et al.2000; Stenberg et al.2010; Tang and Li 2008 YehP-M and Wierenga 2009). Turkoglu and Kilic (2012) in parallel to our study findings found that caregivers facing with problems in family relations discomfort, positive adaptation and financial distress subscales and quality of life scores are lower. Ugur and Fadiloglu (2010) found that 40% of caregivers are interested in less with home, 8% of caregivers' strain rate living changes in the family relations increase.

In our study, it was found that the 85,8% of caregiver family members experience changes in their social relationships because of the patient's responsibilities. In studies conducted in parallel with our study findings it was determined that with the extension of the care duration, family members experience lacks in fulfilling their responsibilities, this situation affect their responsibilities and social life (Mosher et al.2016; Nayak et al.2014; Okcin and Karadakovan 2012; Tsigaropoulos et al.2009; Ugur and Fadiloglu 2010; YehP-M and Wierenga 2009). In our study, according to the changes in social living conditions it was found to be statistically significant difference between QOL and care giving stress points. Mayers et al (2001) found that 64% of the family members completely take care of care responsibilities such as bathing, feeding, walking and this case affect the family members' daily responsibilities and

role changes. In particular, the disease caregivers bringing their patients in outpatient chemotherapy unit at the hospital every day may be forced to postpone their own lives. In this case, the family and social life of caregiver individuals can be changed.

In our study, it was found that caregiver family members suffer psychological distress at every stage of the process of providing care. It was found in studies conducted that most of the family members experience anger, irritability, depression, anxiety symptoms (Cal et al. 2017; Friðriksdóttir et al.2001; Kim et al.2007; Nayak et al.2014; Stenberg et al.2010; Tang and Li 2008; Ugur and Fadiloglu 2010)

In our study, all the family members providing care stated that they experienced the side effects caused by the chemotherapy on their patients and not cope with them.

### Conclusion

It was found that caregiver family members' care burden and QOL are in the moderate level. By reducing the maintenance burden of family member caregivers, it can be considered that the QOL of both family members and patients may increase.

Caregiver family members providing care for ambulatory patients receiving chemotherapy experience problems in the biopsychosocial and economic aspects and it was determined that they can't deal with these problems.

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**Table 1** Socio-Demographic Characteristics of Caregivers and CSI and CQOLC Mean Scores (N=120)

Socio-Demographic Characteristics	n (%)	Caregiver's Stress Index(CSI)		Cancer Patients' Caregiver FamilyMembers' Life Quality Scale (CQOLC)							
		Mean ± SD	p	Pshs		phs		das		seis	
				Mean ± SD	p	Mean ± SD	p	Mean ± SD	p	Mean ± SD	p
<b>Age</b>											
18-30 years	37 (30.8)	17.38±2.62	.754	55.97±14.56	.326	38.68±15.23	.081	43.78±9.25	.694	18.08±8.81	.209
31-50 years	44 (36.7)	16.84±1.96		51.45±15.27		31.39±16.42		42.66±8.06		14.55±9.02	
51-74 years	39 (32.5)	17.26±2.34		51.85±13.13		33.13±18.07		42.74±7.23		16.08±8.11	
<b>Gender</b>											
Female	81 (67.5 )	16.89±1.93	.217	49.81±13.52	.001	30.01±14.73	< .001	41.47±6.96	.004	15.68±8.35	.360
Male	39 (32.5)	17.70±2.87		59.54±14.14		42.90±17.59		46.28±9.49		17.08±9.48	
<b>Marial Status</b>											
Single	34 (28.3)	17.91±2.75	.090	54.55±15.68	.693	43.61±17.31	.000	44.24±9.78	.497	19.42±9.18	.030
Married	86 (72.3)	16.86±2.05		52.74±13.59		30.86±15.14		42.65±7.46		14.92±8.29	
<b>Education Level</b>											
Primary school	38 (32.5)	17.08±2.18	.098	49.53±13.44	.006	32.03±17.54	.015	43.42±8.02	.059	14.42±8.45	.020
Middle School	21 (17.5)	16.68±1.83		49.00±16.85		28.11±16.06		44.00±7.90		17.84±9.06	
High School	39 (33.3)	16.87±2.58		53.31±13.28		34.56±15.35		40.95±8.28		14.87±8.70	
University	22 (18.3)	18.29±2.40		62.81±12.42		44.48±15.92		44.57±7.96		20.76±8.04	
<b>Working Status</b>											
Employed	43 ( 35.8)	17.62±2.68	.191	60.38±14.22	<.001	48.97±13.01	.002	44.93±9.81	.148	17.29±9.48	.219
Unemployed	77 ( 64.7)	16.84±2.02		40.86±17.99		30.12±14.45		41.75±6.61		15.35±8.21	
<b>IncomeStatus</b>											
Less in come	68 (57.1)	16.65±1.72	.023	50.19±14.26	.069	30.01±15.514	.006	42.22±6.76	.380	13.40±8.14	<.001
Middle in come	46 (38.7)	17.57±2.68		55.35±13.51		38.11±16.46		43.57±9.72		18.90±8.01	
High in come	6 (5.0)	19.40±3.60		64.00±13.66		49.80±18.35		47.00±9.17		24.40±5.78	

**Table 2** Care Giving Characteristics of Care Function and CSI and CQOLC Mean Scores (N=120)

Care Giving Characteristics	n (%)	Caregiver's Stress Index (CSI)		Cancer Patients' Caregiver Family Members' Life Quality Scale (CQOLC)							
		Mean ± SD	p	Pshs		Phs		das		seis	
				Mean ± SD	p	Mean ± SD	p	Mean ± SD	p	Mean ± SD	p
<b>Spent time for caregiving every day</b>											
1-10 Hours	34(28.3)	17.26±2.44		57.82±11.70		37.12±16.46		44.59±8.91		16.44±8.18	
11-20 Hours	41 (34.2)	17.27±2.51	.733	58.61±13.41	<.001	38.22±15.49	.005	43.17±8.65	.461	18.32±10.18	.070
21 Hours	45 (37.5)	16.93±1.99		44.18±12.97		28.33±16.82		41.73±6.95		13.91±7.18	
<b>Duration of spent time for caregiving</b>											
3-12 Months	34 (28.3)	17.68±2.40		56.79±14.71		36.00±19.28		44.06±9.07		17.26±9.08	
13-24 Months	29 (24.2)	16.93±2.05	.053	49.55±16.39	.308	33.10±14.65	.997	43.97±9.90	.661	16.83±9.02	.733
25-36 Months	32 (26.7)	16.47±2.45		52.19±13.97		33.41±16.72		41.75±7.41		15.19±9.30	
36 Months and above	25 (20.8)	17.52±2.08		52.76±11.42		34.04±16.30		42.20±5.02		15.00±7.18	
<b>Support from family/friends</b>											
Yes	73 (60.8)	17.23 ±2.55	.547	55.92±14.83	<b>.004</b>	37.23±16.87	<b>.012</b>	43.95±8.67	.122	19.22±8.15	<b>&lt;.001</b>
No	47 (39.2)	17.00± 1.86		48.4±12.56		29.45±15.66		41.62±7.11		11.34±7.36	
<b>Degree of proximity of the caregivers</b>											
Partner	46 (38.3)	17.1 ± 1.91		48.72±14.37		30.10±16.10		42.68±6.66		13.60±8.10	
Mother	29 (24.2)	17.41 ± 2.71		56.56±15.17		39.62±16.90		43.56±9.99		19.90±9.04	
Father	19 (15.8)	17.11 ±2.51	.951	58.00±11.56	<b>.028</b>	35.74±15.30	<b>.040</b>	42.48±8.45	.160	16.30±7.72	<b>.015</b>
Children	3 (2.5)	16.33 ± 0.60		41.33±12.86		18.33±2.31		35.33±0.58		8.33±3.79	
Other	23 (19.2)	17.10± 2.50		54.36±13.65		36.43±17.96		44.60±8.47		17.52±9.13	

Pshs: Psychological and Spiritual Health Status    phs: Physical Health Status    das: Diagnostic Approach Status    seis: Support and Economic Impact Status

**Table 3** Experienced Problems Related to Care Giving Function and CSI and CQOLC Mean Scores (N=120)

Experienced Problems Related to Care Giving Function	Caregiver's Index (CSI)	Stress	Cancer Patients' Caregiver Family Members' Life Quality Scale (CQOLC)								
			n (%)	Mean ± SD	p	Pshs	phs	das	seis	p	
<b>Financial problems</b>											
Yes	83 (69.1)	16.30±1.73		48.61±12.93		27.97±13.06		41.65±7.09		12.51±7.12	
No	37 (31.1)	19.03±2.32	<.001	62.65±13.05	<.001	47.73±16.33	<.001	46.08±9.61	.461	24.24±6.28	<.001
<b>Negative changes in family relationships</b>											
Yes	80 (66.7)	16.38±1.84		51.48±14.37		30.45±14.14		42.20±7.62		14.21±8.17	
No	40 (33.3)	18.68±2.37	<.001	55.98±14.20	.189	41.70±19.17	.002	44.70±8.98	.063	19.98±8.60	.001
<b>Support from family/friends</b>											
Yes	103(86.6)	16.78±2.11		52.38±13.56		32.06±14.64		42.40±7.89		15.16±8.62	
No	17 (14.1)	19.44±2.22	<.001	57.50±19.10	.114	49.31±21.69	.001	47.19±9.10	.024	22.10±7.10	.002

Pshs: Psychological and Spiritual Health Status    phs: Physical Health Status    das: Diagnostic Approach Status    seis: Support and Economic Impact Status