

## EXAMINATION OF THE RELATIONSHIP BETWEEN THE QUALITY OF LIFE AND COMFORT LEVELS OF CAREGIVERS OF HOME-CARE PATIENTS

EVDE BAKIM ALAN HASTALARIN BAKIM VERİCİLERİNİN YAŞAM KALİTELERİ VE KONFOR DÜZEYLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

Muhammed Burak BİLGİN <sup>1</sup>, Behice ERCİ <sup>2</sup>

<sup>1</sup> Siirt Education and Research Hospital, Home Health Services, Siirt, Türkiye.

<sup>2</sup> Inonu University, Faculty of Nursing, Malatya, Türkiye.

### ABSTRACT

**Objective:** This research aimed to investigate the association between the quality of life and the comfort levels of caregivers providing home care to patients.

**Method:** This descriptive and correlational study was conducted with 341 caregivers caring for home health patients affiliated to the health directorate of a province. Data were collected using the "Caregiver Recognition Form", "General Comfort Questionnaire" and "SF-36 Quality of Life Scale". SPSS 23.0 statistical software programme was used to evaluate the data.

**Results:** In the research, it was observed that 73.3% of the caregivers were of the female gender, 78.9% were in a married status, 28.7% were spouses of the patients, 81.5% were not employed, 26.7% had no formal education, 28.2% had completed primary school, and 89.7% primarily provided physical support. A significant relationship was found between gender, marital status, education level, degree of relationship with patients and employment status and quality of life ( $p<0.05$ ). In addition, a significant relationship was found between gender, marital status, education level, type of relationship with patients and the presence of social security and comfort level ( $p<0.05$ ).

**Conclusion:** A significant and moderately positive relationship was found between the quality of life and comfort levels of caregivers ( $p<0.05$ ).

**Keywords:** Home Care, Caregiver, Quality of Life, Comfort Level.

### ÖZET

**Amaç:** Bu araştırmanın amacı, hastalara evde bakım sağlayan bakıcıların yaşam kalitesi ve konfor düzeyleri arasındaki ilişkiyi incelemektir.

**Yöntem:** Tanımlayıcı ve ilişkisel tipteki bu araştırma bir ilin sağlık müdürlüğüne bağlı evde sağlık hastalarına bakım veren 341 bakım verici ile yürütüldü. Veriler "Bakım Veren Tanıma Formu", "Genel Konfor Anketi" ve "SF-36 Yaşam Kalitesi Ölçeği" kullanılarak toplanmıştır. Verilerin değerlendirilmesinde SPSS 23.0 istatistik yazılım programı kullanıldı.

**Bulgular:** Araştırmada bakım verenlerin %73,3'ünün kadın olduğu, %78,9'unun evli olduğu, %28,7'sinin hastanın eşi olduğu, %81,5'inin çalışmadığı, %26,7'sinin örgün eğitim almadığı, %28,2'sinin ilkökul mezunu olduğu ve %89,7'sinin öncelikle fiziksel destek sağladığı görülmüştür. Cinsiyet, medeni durum, eğitim düzeyi, hastalarla ilişki derecesi ve çalışma durumu ile yaşam kalitesi arasında anlamlı bir ilişki bulunmuştur ( $p<0.05$ ). Ayrıca, cinsiyet, medeni durum, eğitim düzeyi, hastalarla ilişki türü ve sosyal güvence varlığı ile konfor düzeyi arasında anlamlı bir ilişki tespit edilmiştir ( $p<0.05$ ).

**Sonuç:** Bakım verenlerin yaşam kalitesi ile konfor düzeyleri arasında istatistiksel olarak anlamlı, orta düzeyde pozitif bir ilişki bulunmuştur ( $p<0.05$ ).

**Anahtar Kelimeler:** Evde Bakım, Bakım Veren, Yaşam Kalitesi, Konfor Düzeyi.

**Sorumlu Yazar / Corresponding Author:** Muhammed Burak BİLGİN, Specialist Nurse, Siirt Education and Research Hospital, Home Health Services, Siirt, Türkiye. **E-mail:** [muhammedburakbilgin@gmail.com](mailto:muhammedburakbilgin@gmail.com)

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## **INTRODUCTION**

Developments in science and technology and advances in diagnosis and treatment methods in medicine have prolonged the average life expectancy of people. While these advances have led to an increase in the life expectancy of people on the one hand, on the other hand, it has caused an increase in the problems of the elderly, who have mostly lost their health, have mobility limitations and in a sense have become individuals in need of care (Baran et al., 2005). The increase in the age of the population, the increase in disabilities and persistent diseases has led to an increase in the need for health services and therefore to an increase in the density of hospitals (Taşdelen and Ates, 2012). Home health services are the provision of examination, treatment, examination and rehabilitation services by a professional team in the environment where individuals who are bedridden, disabled or have difficulties in accessing health institutions live (Sögüt and Dündar, 2017). In addition to these services, it is clear that people need the support of their caregivers. In our society and in developed countries, supportive family relationships continue despite the differences in social structures (Sögüt and Dündar, 2017). When examined from this perspective, it is seen that caregivers are mostly women-centred and primarily responsible for wives, daughters and daughters-in-law (Sögüt and Dündar, 2017). Although caring for the individuals receiving care by their relatives made them feel better psychologically and physically, it was determined that situations such as physical difficulty, sleep problems, social isolation, burnout, fatigue, hopelessness, anxiety and fear of losing a relative affected the quality of life of the caregivers (Tel et al, 2012; Hacıalioglu et al, 2010; Karahan and Güven 2002). No research examining the comfort levels of caregivers was found in the literature (Karahan and Güven 2002). Decreased quality of life of caregivers may negatively affect their comfort levels. Therefore, determining the level of relationship between comfort levels and quality of life is a critical element in planning the nursing approach.

The study seeks to investigate the correlation between the comfort levels and the quality of life of caregivers providing home care to patients.

## **MATERIALS AND METHODS**

### **Purpose and Type of Research**

Our study, which aims to examine the quality of life and comfort levels of individuals caring for patients registered for home care, is relational and descriptive.

### **Population and Sample of the Study**

The population of the study consisted of 501 individuals caring for home health patients affiliated to the health directorate of a province. The size of the sample was determined as 341 individuals to represent the universe at 95% confidence level and 0.05% error margin as a result of the power analysis. participants were selected by random sampling technique.

### **Data Collection Tools**

Data collection encompassed the use of the "Caregiver Identification Form," the "SF-36 Quality of Life Scale," and the "General Comfort Questionnaire."

### **Caregiver Identification Form**

This questionnaire was developed by the researcher and consists of ten questions to identify the characteristics of caregivers.

### **SF- 36 Quality of Life Scale**

Developed in 1987, the SF-36 Quality of Life Scale is an individualised examination tool designed for the evaluation of health policies, clinical applications, research and general population studies (Acaray & Pinar, 2004). Koçyiğit (1999) carried out validity and reliability studies of the Turkish version of this scale. The main purpose of the scale is to be a short, useful and versatile application tool.

This quality of life scale focuses on self-evaluation and includes thirty-six items in total. These items are used to measure eight different dimensions: physical function, social function, role limitations due to physical problems, role limitations due to emotional problems, mental health, energy/vitality, pain and general perception of health. The scale is a personalised assessment tool that can be completed quickly and each subscale is scored separately. Scores are evaluated between 0 and 100, with higher scores indicating superior quality of life (Ware & Sherbourne, 1992). In the study conducted by Koçyiğit

(1999), Cronbach alpha values for the sub-dimensions of the scale ranged between 0.73 and 0.76. In addition, in our study, the overall Cronbach alpha value of the scale was determined as 0.92, and the Cronbach alpha values of the sub-dimensions of the scale were found between 0.72 and 0.94.

### **General Comfort Questionnaire (GCQ)**

The development of this scale involved the utilization of a taxonomic structure guide encompassing the theoretical aspects of comfort. This instrument serves the purpose of delineating comfort requirements, assessing nursing interventions designed to offer comfort, and gauging the attainment of the targeted comfort level. The scale is Likert-type with four or six options and includes 48 questions in total. In this study, four-choice Likert type was preferred when using the scale. The scale comprises three subscales: "refreshment" (sixteen items), "relaxation" (seventeen items), and "overcoming problems" (fifteen items) as detailed by Kuşuoğlu (2008). This scale encompasses both positive and negative items, with nuanced response patterns. Specifically, for positive statements, a high score (4p) signifies a high level of comfort, while a low score (1p) implies a lower comfort level. Conversely, for negative items, a low score (1p) indicates a higher comfort level, while a high score (4p) suggests a lower comfort level (Kuşuoğlu, 2008).

During the scale assessment, negative scores are inverted and combined with positive items. The scale has an evaluation range between a minimum score of 48 and a maximum score of 192. To calculate the mean value, the total scores obtained are divided by the number of items and the result is interpreted between 1 and 4. In this range, a score of 1 represents low comfort, while a score of 4 represents high comfort. In the internal consistency analysis conducted by Kolcaba, the total Cronbach's alpha value was found to be 0.88 and values ranging from 0.66 to 0.80 were determined for the subscales (Kuşuoğlu, 2008). In our study, Cronbach's alpha value was 0.72 for the spaciousness subscale, 0.75 for the relaxation subscale, 0.59 for the superiority subscale and 0.88 for the total Cronbach's alpha value of the general comfort questionnaire.

### **Analysis and Evaluation of Data**

SPSS 23 (Statistical Package for the Social Sciences) programme was used to analyse the collected data. Sociodemographic information of the caregivers was expressed in numbers and percentages. In the analysis of the data, percentages and distributions were calculated and parametric and nonparametric descriptive statistical methods appropriate to the data characteristics were used for comparisons between variables. These methods included correlation analysis, Kruskal-Wallis test, Cronbach's alpha, Tukey test and t-test in independent groups. The outcomes were assessed within a 95% confidence interval and were deemed statistically significant at a significance level of  $p < 0.05$ .

### **Ethical Aspects of the Research**

Ethical approval for the study was obtained from the İnönü University Ethics Committee numbered 2018/15-06, and the research permission was granted by the Siirt Provincial Health Directorate. Permission was obtained from the scale owners for the use of the scale. Before the study, the purpose of the study was explained to the caregivers in detail and their verbal consent was obtained.

### **Limitations of the Study**

The study exhibits no limitations, and the findings can be extrapolated to caregivers of comparable patients.

If there are any deviations from the planned flow of the study, the reasons should be explained and how their impact on the results was minimized or avoided.

## **RESULTS**

Table 1 shows the characteristics of the caregiver identification form. The caregivers who were part of the study had an average age of 41.88 years, with a standard deviation of 13.36, and their ages ranged from 17 to 87 years. Of the participants, 73.3% were female, 78.9% were married, 28.2% were primary school graduates, 26.7% were illiterate, and 81.5% were unemployed. In addition, 85.6% had social security. It was observed that the largest proportion of caregivers (28.7%) was the patient's daughter-in-law and the type of support they provided the most (89.7%) was physical assistance. The duration of

caregiving ranged from a minimum of 1 month to a maximum of 408 months. The mean duration was 90.69 months and the standard deviation was 86.53 months.

**Table 1.** Caregiver Identification Form (n=341)

Variables	n	%
<b>Age</b> (41.88±13.36)		
<b>Gender</b>		
Female	250	73.3
Male	91	26.7
<b>Marital Status</b>		
Married	269	78.9
Single	72	21.1
<b>Education Level</b>		
Illiterate	91	26.7
Literate	34	10.0
Primary School	96	28.2
Middle School	21	6.2
High School	55	16.1
College/ Faculty	44	12.9
<b>Work Status</b>		
Working	63	18.5
Not Working	278	81.5
<b>Social Security</b>		
There is	292	85.6
None	49	14.4
<b>Degree of closeness with the patient</b>		
Son	44	12.9
Daughter	40	11.7
Daughter-in-law	98	28.7
Grandson	24	7.0
Mummy	43	12.6
Spouse	14	4.1
Others	39	11.5
<b>In which way it supports the patient the most</b>		
Psychological Support	25	7.3
Financial Support	8	2.3
Physical Assistance	306	89.7
Other	2	0.6
<b>Maintenance Period (Month)</b> 90.69±86.53		

%; Percent

Table 2 shows the Distribution of Mean Scores of SF-36 Quality of Life Scale Subscales and General Comfort Questionnaire Subscales. In the study, the mean SF-36 score of the caregivers was 52.83 ± 20.80. SF-36 consists of eight different subscale. The mean score of physical function was 70.82 ± 28.29, the mean score of physical role difficulty was 27.27 ± 41.08, the mean score of pain was 63.02 ± 30.67, the mean score of general health was 51.46 ± 23.06, the mean score of vitality (energy) was 54.42 ± 20.75, the mean score of social function was 61.91 ± 27.34, the mean score of emotional role difficulty was 28.83 ± 42.61, and the mean score of mental health was 64.93 ± 18.77.

In the study, the mean score of the General Comfort Questionnaire (GCQ) of the caregivers was found to be 3.21 ± 0.36. It was found that the mean score was 3.12 ± 0.42 in the relief subscale, 3.22 ± 0.42 in the relaxation subscale, and 3.29 ± 0.35 in the superiority subscale.

**Table 2.** Distribution of Mean Scores of SF-36 Quality of Life Scale Subscales and General Comfort Questionnaire Subscales (n:341)

	<b>Mix-Max</b>	<b>X±SD</b>
<b>SF-36</b>	9.38-97.88	52.83±20.80
Physical Function	0-100	70.82±28.29
Physical Role Difficulty	0-100	27.27±41.08
Pain	0-100	63.02±30.67
General Health	0-100	51.46±23.06
Vitality (Energy)	0-100	54.42±20.75
Social Function	0-100	61.91±27.34
Emotional Role Difficulty	0-100	28.83±42.61
Mental Health	0-100	64.93±18.77
<b>GCQ</b>	1.75-3.92	3.21±0.36
Refreshment	1.75-4.00	3.12±0.42
Relaxation	1.47-4.00	3.22±0.42
Superiority	2.07-4.00	3.29±0.35

Table 3 shows the comparison of mean scores of SF-36 subscales according to some sociodemographic characteristics of caregivers. According to the findings of the study, male caregivers were found to be superior to female caregivers in the subscales of SF-36 assessment, especially in physical function, pain, general health, energy and social function. This difference reached statistical significance ( $p < 0.05$ ). In addition, it was found that female caregivers scored higher than male caregivers in the emotional role difficulty subscale and this difference is statistically significant ( $p < 0.05$ ). It was determined that gender had no effect on physical role difficulty and mental health subscales ( $p > 0.05$ ).

It was concluded that marital status did not affect the scores obtained from the physical role difficulty, emotional role difficulty, social function and mental health subscales of the SF-36 scale. However, the mean scores of pain, physical function, vitality (energy) and general health subscales showed statistical significance ( $p < 0.05$ ).

When the physical function, pain, general health, vitality (energy), social function and mental health scores of caregivers were compared between different educational levels, significant statistical differences were found. In particular, in the physical function subscales, a statistically significant difference was observed between illiterate caregivers and those with primary school, secondary school, high school and college/faculty education. In pain subscales, a statistically significant difference was observed between illiterate carers and those with college/faculty education. Similarly, in general health subscales, statistically significant differences were found between illiterate caregivers and primary school, high school and college/faculty graduates. In vitality (energy) subscales, a statistically significant difference was found between illiterate caregivers and primary school and college/faculty graduates. Similarly, there was a statistically significant difference between illiterate and college/faculty graduates in social function subscales. In addition, a statistically significant difference was observed between illiterates and high school graduates in mental health subscales ( $p < 0.05$ ). It was determined that the level of education did not affect the scores obtained from the physical role difficulty and emotional role difficulty subscales ( $p > 0.05$ ).

When the scores obtained from the subscales of "physical function, pain, general health, vitality and emotional role difficulty" were compared according to the employment status of the caregivers, a statistically significant difference was found ( $p < 0.05$ ). However, it was determined that employment status did not affect the scores obtained from physical role difficulty, social function and mental health subscales ( $p > 0.05$ ).

In the comparison of the degree of closeness of the caregivers to the patient with the SF-36 Scale subscale scores, it was determined that the degree of closeness to the patient did not affect the scores obtained from the physical role difficulty and emotional role difficulty subscales ( $p > 0.05$ ). However, a significant difference was found between the groups in general health, vitality (energy), social function, mental health, pain and physical function subscales and this difference was statistically significant ( $p < 0.05$ ). It was determined that the maximum support provided by the caregivers did not affect the scores obtained from the subscales of SF-36 ( $p > 0.05$ ).



**Table 3.** Comparison of Mean Scores of SF-36 Subscales According to Some Sociodemographic Characteristics of Caregivers (n:341)

Features	SF- 36 Scale Subscales							
	Physical Function	Physical Role Difficulty	Pain	General Health	Vitality (Energy)	Social Function	Emotional Role Difficulty	Mental Health
	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD
<b>Gender</b>								
Female	68.8±28.8	29.3±41.9	60.0±31.5	49.2±22.8	51.5±20.2	59.4±28.4	31.8±43.9	64.2±19.3
Male	76.3±26.0	21.7±38.2	71.3±26.7	57.6±22.7	62.2±20.2	68.6±22.6	20.5±37.7	66.7±16.9
t	-2.19	1.58	-3.04	-3.0	-4.30	-3.09	2.34	-1.06
p	<b>0.029</b>	0.116	<b>0.002</b>	<b>0.003</b>	<b>0.000</b>	<b>0.002</b>	<b>0.020</b>	0.290
<b>Marital Status</b>								
Married	69.1±28.0	26.3±40.7	61.1±30.0	49.3±22.2	53.2±20.7	60.5±27.0	27.7±42.0	63.9±19.1
Single	76.9±28.4	30.0±42.4	70.0±32.3	59.3±24.6	58.8±20.1	67.1±28.0	32.8±44.5	68.7±17.0
t	-2.07	-0.76	-2.18	-3.31	-2.03	-1.84	-0.90	-1.96
p	<b>0.039</b>	0.446	<b>0.029</b>	<b>0.0001</b>	<b>0.043</b>	0.065	0.367	0.051
<b>Education Level</b>								
Illiterate	57.4±30.5	22.5±39.4	53.0±30.0	40.7±21.5	47.1±19.3	56.0±27.3	25.6±41.5	58.8±18.5
Literate	68.8±26.3	40.4±48.0	67.6±29.3	47.8±20.5	53.5±16.9	64.7±23.5	46.0±49.9	64.8±15.2
Primary School	76.5±23.0	28.9±41.7	64.6±30.8	56.4±20.0	55.7±20.3	63.8±27.2	28.8±42.6	66.5±18.4
Middle School	79.0±19.2	21.4±37.3	61.7±30.6	49.5±24.2	55.7±20.8	57.1±30.5	23.8±38.2	66.0±23.1
High School	76.1±28.6	27.7±37.7	64.1±28.7	59.1±24.4	57.0±23.0	60.4±28.4	26.6±40.2	69.8±18.0
College/ Faculty	77.0±29.9	25.5±42.6	75.6±28.5	56.9±24.1	63.2±19.5	71.8±25.1	27.2±42.6	67.6±18.7
KW	29.65	5.49	18.89	34.04	20.51	11.85	5.21	17.00
p	<b>0.000</b>	0.358	<b>0.002</b>	<b>0.000</b>	<b>0.001</b>	<b>0.037</b>	0.390	<b>0.004</b>
<b>Employment Status</b>								
Working	78.4±25.8	22.6±38.8	72.0±26.6	58.6±21.4	63.4±18.5	65.4±24.5	20.1±36.6	67.4±16.4
Not Working	69.0±28.5	28.3±41.5	60.9±31.1	49.8±23.1	52.3±20.7	61.1±27.9	30.8±43.6	64.3±19.2
t	2.40	-0.99	2.59	2.76	3.88	1.14	-2.01	1.16
p	<b>0.017</b>	0.320	<b>0.010</b>	<b>0.006</b>	<b>0.000</b>	0.253	<b>0.045</b>	0.244
<b>Social Security</b>								
There is	70.3±28.2	27.9±41.3	63.3±30.4	51.6±22.6	55.0±20.2	62.5±27.0	29.4±42.8	65.3±18.4
None	73.3±28.7	23.4±39.6	61.3±32.4	50.3±25.8	50.9±23.3	58.4±29.3	25.1±41.6	62.2±20.7
t	0.68	-0.70	-0.41	-0.35	-1.28	-0.96	-0.65	-1.10
p	0.497	0.485	0.680	0.724	0.2301	0.334	0.516	0.271
<b>Closeness with the patient</b>								
Son	73.7±28.7	24.4±39.4	68.3±28.4	55.7±22.1	61.4±20.7	66.1±25.2	20.4±36.8	65.0±18.1
Daughter	69.0±28.3	23.1±41.3	56.1±34.0	49.5±23.5	55.5±21.2	60.0±27.9	25.8±41.6	64.2±18.4
Daughter-in-law	73.6±26.1	32.6±43.7	63.6±31.5	52.1±20.6	53.6±19.8	60.8±29.8	35.3±45.3	68.2±18.7
Grandson	86.4±19.4	31.2±44.3	81.2±22.8	68.8±21.3	63.9±19.9	75.0±24.4	27.7±43.5	72.3±17.4
Mummy	62.6±27.0	23.2±37.5	55.7±27.5	43.9±20.0	49.5±17.0	56.9±23.0	29.4±43.7	61.8±16.3
Father	83.9±17.8	17.8±37.2	83.2±21.6	64.7±15.8	66.0±15.0	77.6±21.4	19.0±38.5	69.1±14.8
Spouse	44.3±27.0	18.5±36.5	41.4±26.1	29.9±17.4	35.8±17.4	47.7±25.6	22.2±37.7	51.8±18.7
KW	58.14	7.61	46.70	65.02	50.17	26.15	5.96	29.59
p	<b>0.000</b>	0.368	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.543	<b>0.000</b>
<b>In which way it supports the patient the most</b>								
Psychological/ Emotional Support	73.4±29.4	33.0±44.3	53.5±34.9	48.8±22.8	48.4±16.6	60.0±29.0	32.0±44.5	58.8±18.6
Financial Support	61.2±36.3	9.3±26.5	68.2±16.8	48.8±12.6	57.5±15.3	68.7±24.0	4.1±11.7	69.5±15.9
Physical Support	71.0±27.8	27.4±41.1	63.8±30.5	51.7±23.3	54.9±21.1	61.9±27.4	29.4±42.9	65.4±18.7
KW	1.79	3.21	5.07	0.85	4.23	0.62	3.27	6.19
p	0.615	0.359	0.166	0.836	0.237	0.890	0.351	0.103

\*p<0.05, t: t test, KW: Kruskal- Wallis

Table 4 shows the comparison of the mean scores of the subscales of the general comfort questionnaire according to some sociodemographic characteristics of the caregivers. It was determined that gender did not affect the scores in relaxation and relaxation subscales of the GCQ (p>0.05). However, it was observed that gender affected the score in the superiority subscale (p<0.05).

It was determined that marital status affected the scores on the subscales of the GCQ and single individuals scored higher than married individuals (p<0.05).

When the education levels of the caregivers and the scores of the subscales of the GCQ were analysed, a significant difference was found between illiterates, literates and college/faculty graduates in the relief subscale. In the relaxation subscales, a notable distinction was identified between illiterates and literates, as well as between primary school graduates and college/faculty graduates. Moreover, in the superiority subscales, a statistically significant difference was observed between illiterates and literates, as well as among primary school graduates, high school graduates, and college/faculty graduates ( $p < 0.05$ ). It was determined that employment status did not affect the scores obtained from the subscales of the GCQ ( $p > 0.05$ ). It was determined that the social security status of the caregivers did not affect the scores obtained from the subscales of the GCQ ( $p > 0.05$ ).

When the degree of closeness of the caregivers to the patient and the scores of the subscales of the GCQ were compared, it was observed that the difference between the patient's spouse and the patient's daughter-in-law, son, grandson and father was statistically significant in the relief subscale. In the relaxation subscales, the difference between the patient's spouse and son, daughter, daughter-in-law, granddaughter and grandson was statistically significant. In the superiority subscales, the difference between the patient's spouse and son, daughter-in-law, grandson and father was statistically significant ( $p < 0.05$ ). It was determined that the support provided by the caregivers to the patient did not affect the scores obtained from the subscales of the GCQ ( $p > 0.05$ ).

**Table 4.** Comparison of Mean Scores of General Comfort Questionnaire Subscales According to Some Sociodemographic Characteristics of Caregivers (n:341)

Features	General Comfort Questionnaire Subscales		
	Refreshment X±SD	Relaxation X±SD	Superiority X±SD
<b>Gender</b>			
Female	3.10±0.43	3.20±0.43	3.27±0.36
Male	3.19±0.40	3.28±0.39	3.35±0.31
t	-1.81	-1.57	-2.17
p	0.070	0.115	<b>0.031</b>
<b>Marital Status</b>			
Married	3.09±0.43	3.20±0.43	3.27±0.36
Single	3.23±0.37	3.32±0.38	3.37±0.28
t	-2.50	-2.10	-2.16
P	<b>0.013</b>	<b>0.036</b>	<b>0.031</b>
<b>Education Level</b>			
Illiterate	2.99±0.44	3.08±0.46	3.15±0.37
Literate	3.26±0.41	3.37±0.42	3.38±0.35
Primary School	3.11±0.37	3.25±0.36	3.31±0.32
Middle School	3.22±0.39	3.22±0.43	3.38±0.30
High School	3.14±0.42	3.26±0.34	3.32±0.30
College/ Faculty	3.26±0.45	3.32±0.48	3.38±0.37
KW	19.68	19.68	20.99
p	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>
<b>Employment Status</b>			
Working	3.21±0.41	3.31±0.37	3.36±0.31
Not Working	3.10±0.42	3.20±0.43	3.27±0.35
t	1.85	1.82	1.65
p	0.065	0.069	0.099
<b>Social Security</b>			
There is	3.12±0.41	3.22±0.40	3.30±0.34
None	3.15±0.48	3.25±0.53	3.25±0.40
t	0.42	0.38	-0.83
p	0.670	0.703	0.407
<b>Degree of closeness with the patient</b>			
Son	3.20±0.46	3.23±0.45	3.30±0.39
Daughter	3.07±0.44	3.21±0.42	3.30±0.34
Daughter-in-law	3.17±0.41	3.28±0.40	3.30±0.34
Grandson	3.31±0.33	3.39±0.29	3.45±0.23
Mummy	3.05±0.38	3.13±0.37	3.21±0.35

Father	3.31±0.20	3.42±0.26	3.46±0.16
Spouse	2.80±0.43	2.87±0.44	3.07±0.37
KW	36.07	43.13	30.55
P	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**In which way it supports the patient the most**

Psychological/ Emotional Support	2.99±0.50	3.09±0.54	3.20±0.39
Financial Support	3.01±0.28	3.14±0.33	3.31±0.38
Physical Support	3.14±0.42	3.24±0.41	3.30±0.35
KW	6.03	2.98	4.09
P	0.110	0.394	0.252

Table 5 shows the evaluation of the relationship between the quality of life subscales and the scores obtained from the general comfort questionnaire subscales. A positive correlation was established between the subscales of the Quality of Life and the subscales of the General Comfort Questionnaire, and this relationship was found to be statistically significant ( $p < 0.05$ ). These findings show that as the quality of life of caregivers increases, their comfort levels also increase.

In the study, it was determined that there was a positive and moderately significant relationship between the mean scores of the Quality of Life Scale and the General Comfort Questionnaire ( $p < 0.05$ ).

**Table 5.** Evaluation of the Relationship Between the SF-36 Subscales and the Scores Obtained from the General Comfort Questionnaire Subscales (GCQ) (n: 341)

SF-36 Subscales	General Comfort Questionnaire Subscales					
	Refreshment		Relaxation		Superiority	
	r	p	r	p	r	p
Physical Function	0.537	0.000	0.536	0.000	0.394	0.000
Physical Role Difficulty	0.301	0.000	0.321	0.000	0.260	0.000
Pain	0.592	0.000	0.595	0.000	0.528	0.000
General Health	0.492	0.000	0.547	0.000	0.473	0.000
Vitality (Energy)	0.517	0.000	0.535	0.000	0.524	0.000
Social Function	0.532	0.000	0.566	0.000	0.510	0.000
Emotional Role Difficulty	0.312	0.000	0.343	0.000	0.264	0.000
Mental Health	0.541	0.000	0.536	0.000	0.528	0.000
<b>SF-36</b>						
<b>GCQ</b>	<b>r: 0.684</b>		<b>p: 0.000</b>			

**DISCUSSION**

The objective of this study is to explore the association between the quality of life and the comfort levels of individuals caring for patients in home care, and to evaluate the results in the context of relevant literature. According to the results of the study, examination of the SF-36 scores of the caregivers showed that they had the lowest scores in the physical role difficulty subscale of quality of life and the highest scores in the physical function subscale (Table 2). Therefore, caregivers' quality of life surpasses the median level in subscales like "physical function, pain, general health, vitality (energy), social function, and mental health," but falls below the median level in subscales such as "physical role difficulty and emotional role difficulty". Similarly, the findings of this study overlap with the findings of Çelik (2014). In Çelik's (2014) study, the lowest quality of life scores among caregivers were observed in the physical role difficulty and emotional role difficulty subscales, while the highest score was recorded in the physical function dimension. Similarly, the study of Morimoto et al. (2003) showed that the quality of life of caregivers was lowest in the general health domain and highest in the physical function and social function subscales.

When the relationship between sociodemographic characteristics of caregivers and SF-36 scores was analysed, differences in mean SF-36 scores were observed depending on the gender of the caregivers. More specifically, female caregivers recorded lower scores on the subscales "physical function, pain, general health, vitality (energy) and social function" and higher scores on the subscale "emotional role difficulty". This difference was statistically significant ( $p < 0.05$ ). However, it was



determined that gender did not affect the scores obtained from physical role difficulty and mental health subscales. ( $p>0.05$ ). The study conducted by Yeşil et al. (2016) revealed that women had lower scores than men in the subscales of "physical function, pain, general health, vitality (energy) and mental health" in terms of quality of life. In addition, the difference in scores in pain and mental health subscales was found to be statistically significant. In Çelik's (2014) study, it was found that, concerning quality of life, women scored lower than men in the subscales of "emotional role difficulty, physical role difficulty, vitality (energy), general health, mental health, pain, social function." Furthermore, a statistically significant difference in quality of life scores between genders was established in the subscales of physical role difficulty, vitality (energy), general health, pain, and social function. These findings could suggest that, in general, women tend to take on the caregiving role for an extended duration and are more actively engaged in the direct personal care of patients, whereas men are often more involved in providing financial support (Çelik, 2014).

Within the study, SF-36 scores were examined in relation to the marital status of caregivers, revealing that the quality of life of married individuals was lower than that of single individuals. This disparity was statistically significant among the mean scores of the groups in the subscales of "physical function, pain, general health, and vitality (energy)" ( $p<0.05$ ). Yeşil et al. (2016) revealed that there was a statistically significant difference in the mean scores of the physical function subscale. In addition, when the average quality of life scores of caregivers according to their marital status were analysed in the study of Çelik (2014), it was found that there was no significant difference between the groups. This situation indicates a decrease in quality of life resulting from the fact that spouses both assume the role of caregiver and take over some of the duties and responsibilities fulfilled by their sick spouses. When we looked at the effect of education level on the quality of life of caregivers in our study, it was observed that the illiterate group had lower scores compared to other groups ( $p<0.05$ ). However, it was determined that the educational status did not affect the scores obtained from the physical role difficulty and emotional role difficulty subscales ( $p>0.05$ ).

Notable distinctions were detected in several subscales of the SF-36 evaluation. Precisely, in the "physical function" subscale, statistically significant discrepancies were observed between the illiterate group and the primary school, secondary school, high school, and college/faculty groups. Furthermore, in the "pain" subscale, a significant distinction was observed between the illiterate group and the college/faculty group. Moreover, in the "general health" subscale, significant distinctions were observed between the illiterate group and the primary school, high school, and college/faculty groups. The "vitality (energy)" subscale showed statistically significant differences between the illiterate group and the primary school and high school/faculty groups. Likewise, in the "social function" subscale, significant differences were present between the illiterate group and the high school/faculty group. Finally, within the "mental health" subscale, significant variances were noticeable between the illiterate group and the high school group ( $p<0.05$ ). Similarly, in the study of Çelik (2014), the mean SF-36 scores of the caregivers examined on the basis of educational levels were found to be higher in favour of those with secondary education and above compared to those with secondary education and below, and this difference was found to be statistically significant. Similarly, the study of Carod-Artal et al. (2009) showed that the level of education of caregivers was related to their quality of life. In the study of Iconomou et al. (2001), it was found that caregivers with low education level experienced more emotional stress, their lives were more affected and their physical health was worse than those with high education level. It is thought that the understanding and management of health can be positively affected by increasing the level of education, conscious coping mechanisms can be developed and financial opportunities can be improved.

It was determined that the employment status affected the scores obtained from "physical function, pain, general health, vitality (energy) and emotional role difficulty" subscales of SF-36 ( $p<0.05$ ). These results were found to be compatible with Uslu's (2011) study in which working individuals had higher scores in physical function and pain subscales compared to non-working individuals. In the study of Yeşil et al. (2016), it was observed that working individuals scored higher on the pain subscale than non-working individuals and this difference was statistically significant. These findings suggest that caregivers who are employed may experience higher quality of life in the subscales of physical function, general health, vitality (energy), and pain, possibly due to regular work and increased physical endurance.

In this study, when the mean SF-36 scores of the caregivers were analysed according to their social security status, it was determined that social security did not affect the quality of life. Similarly, in the study conducted by Uslu (2011), it was determined that social security did not affect quality of life. In the analysis of the SF-36 mean scores concerning the caregivers' relationships with their patients, the study identified statistically significant distinctions among the groups within the subcategories of "physical function, pain, general health, energy level, social function, and mental health" ( $p < 0.05$ ). In a study by Yeşil et al. (2016), it was reported that the difference between the mean scores in the subcategories of bodily function, physical role difficulty, pain and mental health was statistically significant depending on the degree of closeness of caregivers with their patients. In Uslu's (2011) study, significant differences were found between the groups in the subcategories of physical function, physical role difficulty, pain, energy level and emotional role difficulty. In Baltayan's (2012) study, it was noted that there were statistically significant differences in quality of life scores in the subcategories of physical function, pain, general health, energy level, social function and mental health depending on the degree of closeness between caregivers and patients. The findings of this study appear to align with the outcomes of previous studies in the existing literature. Similar studies on the comfort levels of home caregivers were not found in the literature, so the findings were discussed by utilising indirect sources.

In the study, the mean scores of the subscales of the GCQ were analysed according to the gender of the caregivers. According to the findings, it was determined that men scored higher than women in all subscales, but only the difference in the superiority subscales was statistically significant ( $p < 0.05$ ). These results suggest that the fact that men have more social and economic power makes it easier for them to cope with problems and this situation positively affects their comfort levels. It was determined that marital status affected the scores in all subscales of the GCQ ( $p < 0.05$ ). It is thought that the comfort levels are low because the cultural traditions of women, most of whom are married women, are ignored.

In the study, when the mean scores of the subscales of the GCQ were analysed according to the educational status of the caregivers, it was found that the highest scores were obtained by college/faculty graduates and the lowest scores were obtained by illiterates. Significant differences were observed between the mean scores of the educational level groups in all subscales of the GCQ, and these differences were statistically significant ( $p < 0.05$ ). As the level of education increases, it is thought that the comfort levels of individuals are higher than those of illiterate individuals because they can find methods to overcome negativities more easily. It was determined that working individuals did not affect the scores obtained from the subscales of the GCQ ( $p > 0.05$ ). It is thought that the fact that individuals who are employed in any job have a better reaction to a disease than those who are not employed, and having social security increases their comfort levels.

In the study, it was determined that the social security of the caregivers did not affect the scores they received from the subscales of the GCQ ( $p > 0.05$ ). It is thought that social security of caregivers cannot affect their general comfort alone.

In the study, it was determined that the spouses of the caregivers scored lower on the subscales of the GCQ compared to the other individuals and the score they received was significant ( $p < 0.05$ ). It is thought that the comfort level of the spouses decreased due to the fact that they both undertake the caregiver role and assume some of the roles and responsibilities fulfilled by the sick spouse.

In the study, it was determined that the direction of support provided by the caregivers did not affect the score they received from the GCQ ( $p > 0.05$ ). The assistance given by caregivers is believed not to be the sole factor influencing their overall comfort.

In the study, a statistically significant, moderate positive correlation was observed between the average scores of caregivers derived from the SF-36 and GCQ ( $p < 0.05$ ). This suggests that as caregivers' comfort levels increase, their quality of life also improves. It is thought that the good physical, psychospiritual, sociocultural and environmental status of the caregiver and having the necessary comfort lead to an increase in quality of life.

## **CONCLUSION**

Based on the study findings, it was evident that gender, marital status, educational level, employment status, and the degree of closeness to the patient had an impact on the quality of life of caregivers. At

the same time, social security and the most support provided to the patient did not have a significant effect on quality of life. The quality of life of the caregivers was found to be moderate. On the other hand, gender, marital status, education level, social security and the degree of closeness with the patient were found to be effective on the comfort level of caregivers, but employment status and the most support provided to the patient did not affect the comfort level. The results show that the comfort level of the caregivers is good. In addition, a positive medium level relationship was found between the quality of life of the caregivers and the comfort level.

In line with these results, it is recommended that quantitative studies should be conducted to improve the quality of life of caregivers. In addition, it is recommended to carry out studies that can increase the physical, environmental, sociocultural and psychological-spiritual comfort level of caregivers.

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### Conflict of Interest

There is no conflict of interest between the authors.

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### REFERENCES

- Acaray, A., & Pınar, R. (2004). Kronik Hemodiyaliz Hastalarının Yaşam Kalitesinin Değerlendirilmesi. Cumhuriyet Üniversitesi Hemsirelik Yüksek Okulu Dergisi, 8(1).
- Baltayan, A.O. (2012). Yaşlı Hastalara Bakım Veren Kadınların Bakım Yüklerinin ve Yaşam Kalitelerinin İncelenmesi. Yüksek Lisans Tezi. İstanbul Arel Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Baran, A.G., Kalıncara, V., Aral, N., Akın, G., Baran, G., & Özkan, Y. (2005). Yaşlı ve aile ilişkileri araştırması: Ankara örneği. TC Başbakanlık Aile ve Sosyal Araştırmalar Genel Müdürlüğü Yayınları. Genel Yayın, (127).
- Carod-Artal, F. J., Ferreira Coral, L., Trizotto, D. S., & Menezes Moreira, C. (2009). Burden and perceived health status among caregivers of stroke patients. Cerebrovascular Diseases, 28(5), 472-480.
- Çelik, A. (2014). İnmeli Hastalarda Fonksiyonel Durumun Bakım Verenlerin Bakım Yüküne ve Yaşam Kalitesine Etkisi. Yüksek Lisans Tezi. Sağlık Bilimleri Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara.
- Hacıoğlu, N., Özer, N., Erdem, N., & Erci, B. (2010). The quality of life of family caregivers of cancer patients in the East of Turkey. European Journal of Oncology Nursing, 14(3), 211-217.
- Iconomou, G., Vagenakis, A. G., & Kalofonos, H. P. (2001). The informational needs, satisfaction with communication, and psychological status of primary caregivers of cancer patients receiving chemotherapy. *Supportive Care in Cancer*, 9(8), 591-596.
- Karahan, A. & Güven, S. (2002). Yaşlılıkta evde bakım. Turk Geriatri Derg, 5 (4), 155-9.
- Kocuyigit, H. (1999). Kısa Form-36 (KF-36)'nın Türkçe versiyonunun güvenilirliği ve geçerliliği. İlaç ve tedavi dergisi, 12, 102-106.
- Kuğuoğlu, S. (2008). Genel konfor ölçeğinin Türkçe'ye uyarlanması. Florence Nightingale Journal of Nursing, 16(61), 16-23.
- Morimoto, T., Schreiner, A. S., & Asano, H. (2003). Caregiver burden and health-related quality of life among Japanese stroke caregivers. Age and ageing, 32(2), 218-223.
- Söğüt, Ç., & Dündar, P. E. (2017). Manisa'da bir toplum sağlığı merkezi bölgesinde evde sağlık hizmeti alan kişilere bakım verenlerin yükünün değerlendirilmesi. Turkish Journal of Public Health, 15(1), 37.
- Taşdelen, P., & Ateş, M. (2012). Evde bakım gerektiren hastaların bakım gereksinimleri ile bakım verenlerin yükünün değerlendirilmesi. Hemsirelikte eğitim ve araştırma dergisi, 9(3), 22-29.
- Tel, H., Demirkol, D., Kara, S., & Aydın, D. (2012). KOAH'lı Hastaların Bakım Vericilerinde Bakım Yükü ve Yaşam Kalitesi. Turkish Thoracic Journal/Turk Toraks Dergisi, 13(3).
- Uslu, H. (2011). Kalp Yetersizliği Olan Hastaların ve Bakım Verenlerin Anksiyete-Depresyon Düzeyleri ve Yaşam Kalitelerinin Belirlenmesi. Yüksek Lisans Tezi. Akdeniz Üniversitesi Sağlık Bilimleri Enstitüsü, Antalya.
- Ware Jr, J. E., & Sherbourne, C. D. (1992). The MOS 36-item short-form health survey (SF-36): I. Conceptual framework and item selection. Medical care, 473-483.
- Yeşil, T., Uslusoy, E.Ç., & Korkmaz, M. (2016). Kronik Hastalığı Olanlara Bakım Verenlerin Bakım Yükü Ve Yaşam Kalitesinin İncelenmesi. Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi, 5(4), 54-66.