

The Relationship Between Care Burden and Psychological Resilience of Caregivers of Elderly Surgical Patients: A Descriptive Study

Abstract

Background: The care burden on caregivers of elderly surgical patients causes physical, psychological, economic, and social problems arising from the care undertaken by the caregiver. The level of psychological resilience is important in coping with these problems.





Aim: The aim of this study was to evaluate the relationship between care burden and the psychological resilience status of caregivers of elderly surgical patients.

Methods: This descriptive cross-sectional study was conducted with caregivers of elderly surgical patients in the surgical clinics of educational research and a state hospital. The study was completed with 151 caregivers representing the population. The data were collected using the Patient Descriptive Characteristics Form, Caregiver Descriptive Characteristics Form, the ZARIT Care Burden Scale adapted to the clinic, and the Brief Psychological Resilience Scale. Statistical analyses were conducted using the Student T-test, the One-Way Analysis of Variance (ANOVA) test for comparing scale score averages between groups, and Pearson Correlation tests for examining the relationship between variables.

Results: It was found that 52.3% of the patients in the study sample were male, 96.7% were married, and 15.9% were secondary school graduates. The study determined that the mean Care Burden Scale score of the caregivers of elderly surgical patients was 31.53 ± 8.94 at a mild level, and the mean score of Psychological Resilience was 17.29 ± 3.35 at a moderate level. The correlation analysis between the scales found a negative, weak relationship between care burden and psychological resilience, which was statistically significant ($P < 0.01$) ($r = -0.34$).

Conclusion: It was observed that the psychological resilience levels of caregivers decreased as the care burden increased and that the psychological resilience levels decreased as the caregiving time per hour per day increased. New studies can be conducted to investigate whether interventions aimed at reducing the care burden are effective in increasing psychological resilience levels.

Keywords: Care burden, elderly patients, psychological resilience, surgery

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Introduction

With aging, biological, psychological, and physiological inadequacies occur in elderly individuals, leading to a visible decline in functions and difficulties related to activities of daily living. These physiological and physical changes negatively affect the quality of life by limiting their daily activities.¹ The surgical process can also complicate matters for elderly patients, including chronic diseases, impaired cognitive functions, anesthesia-related risks, slow recovery, depression, and anxiety. These difficulties necessitate support from another individual for the care of the elderly person. The negative impact of caregiving on caregivers is termed "burden",² which places a strain on the person providing care. The ongoing burden in caregiving adversely affects the caregiver's psychology and prevents them from allocating time for their own life. Consequently, the social, emotional, and psychological lives of caregivers are negatively impacted, leading to a decrease in quality of life, psychological issues such as restlessness, anxiety, and unhappiness, and a diminished feeling of satisfaction with life.³ Moreover, according to research findings, the care burden leads to subjective and objective outcomes such as physical, psychological, economic, and social problems arising from the care provided by the caregiver, deterioration of family relations, and loss of individual control.^{4,5} Psychological resilience is an important issue in assessing this process, which affects individuals both psychologically and physically. Psychological resilience is defined as

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the ability to withstand threats that complicate life and create crises, adapt to the process, cope with challenges, and maintain functionality by returning to pre-crisis life. Additionally, psychological resilience is a personality trait that includes cognitive, emotional, and social characteristics, enabling an individual to protect and regain psychosocial health in the face of stressful situations.^{6,7}

All these processes related to the burden of care directly concern individuals who care for elderly surgical patients. Upon reviewing the literature, studies on care burden have primarily focused on individuals with certain chronic diseases.⁸⁻¹⁰ The increase in the elderly population in Türkiye underscores the importance of caring for elderly individuals in the field of surgery. More research on individuals who care for elderly surgical patients will enhance the literature support needed to improve their care standards.

In this context, this study explored the relationship between care burden and the psychological resilience of caregivers of elderly surgical patients.

Study Questions

1. What is the level of care burden and psychological resilience of caregivers of elderly surgical patients?
2. How is the relationship between care burden and psychological resilience of caregivers of elderly surgical patients?

Materials and Methods

Sample and Study Design

The descriptive cross-sectional study involved individuals caring for inpatient elderly surgical patients at Mardin Training and Research Hospital and Kiziltepe State Hospital between October 2022 and January 2023. The research sample included 151 individuals, calculated with a 95% confidence level and 80% power, and a tolerance rate not exceeding 0.05 of the relevant parameter. The haphazard non-probability method was used for sample selection. Sampling inclusion criteria were: a) being 18 years of age or older, b) having no communication problems, c) volunteering to participate in the study and caring for elderly surgical patients.

Data Collection Instruments

Data collection in this study was conducted using the Patient Identifying Characteristics Form, Descriptive Characteristics Form for Caregivers, the clinic-adapted ZARIT Care Burden Scale, and the Brief Psychological Resilience Scale.

Patient Identifying Characteristics Form

The Patient Identifying Characteristics Form is used for collecting data about patients' introductory characteristics. The form consists of 12 questions including age, gender, marital status, education level, income level, profession, employment status, social security, place of residence, diagnosis, length of hospital stay, name of surgery performed.

Caregivers' Descriptive Characteristics Form

The Caregivers' Descriptive Characteristics Form is the second introductory form concerning caregivers. It defines the following baseline characteristics of caregivers: age, income level, gender, marital status, education level, occupation, level of closeness, duration of care, etc. Both forms were created by the researchers based on the literature.

Zarit Care Burden Scale Adapted to Clinic

The Zarit Care Burden Scale, adapted to the clinic and developed by Zarit, Reever, and Bach-Peterson in 1980, assesses the stress experienced by caregivers of dependent or elderly persons. Caregivers or survey researchers can complete this scale.¹¹ Its adaptation to Turkish, including the scale's validity and reliability, was performed by Özer et al.¹² It is a Likert-type scale with ratings ranging from 0 to 4 (never, rarely, sometimes, often, almost always). Scores can range from a minimum of 0 to a maximum of 88 points; higher scores indicate a higher care burden. The care burden is classified as follows: 0-20 points indicate "no care burden," 21-40 points "light care burden," 41-60 points "medium care burden," 61-88 points "heavy care burden." The scale's Cronbach's Alpha was found to be 0.82 by Özer et al,¹² and it was determined to be 0.82 in this study as well.

Brief Psychological Resilience Scale

The Brief Psychological Resilience Scale, developed by Smith et al. in 2008, measures psychological resilience. It is a six-item self-report scale using a five-point Likert system, where "I strongly disagree" scores 1 and "I totally agree" scores 5. Statements second, fourth, and sixth of the scale are scored by reverse coding. A high score obtained after reverse coding these items indicates that the person has a high level of psychological resilience. The adaptation of the scale to Turkish, including the scale's validity and reliability, was carried out by Doğan (2015) with university students. The scale's reliability was determined to be 0.83 with internal consistency. Also, in this study, the Cronbach's alpha was determined to be 0.85

Data Collection

Data was collected by the researchers through face-to-face interviews between October 2022 and January 2023 in the hospitals where the research was conducted. Data collection took an average of 10 minutes for each patient.

Ethical Considerations

Before the research data were collected, ethics committee approval was obtained from Mardin Artuklu University Non-invasive Clinical Research Ethics Committee (Approval Number: 2022/12-13, Date: 13.10.2022). The necessary permission to collect the research data was obtained from the Mardin Provincial Health Directorate (Date: 26.11.2021/Number: E-37201737-949). During the data collection phase, participants were informed about the research and the data collected from patients volunteering to participate in the study. They also agreed to provide their written consent. This study was conducted according to the principles of the Declaration of Helsinki.

Data Analysis

Data analysis of the study data obtained from the questionnaires and scales was carried out on a computer using SPSS 25 (Statistical Package for Social Sciences, IBM Corp., Armonk, N.Y., USA) for Windows. Descriptive statistics, including number, percentage, and mean, were calculated. The normality of the data was determined by the skewness and kurtosis values. The examinations showed that the data had a normal distribution. Statistical analyses were performed using the Student T-test and the One-Way Analysis of Variance (ANOVA) test for comparing scale score averages between groups, and Pearson Correlation tests for examining the relationship between variables.

Table 1. Number and Percentage Distribution of Patients According to Their Descriptive Characteristics (n = 151)

Features	Number	Percentage
	n	%
Gender		
Woman	72	47.7
Male	79	52.3
Marital Status		
Single	5	3.3
Married	146	96.7
Education Status		
Illiterate	44	29.1
Literate	43	28.5
Primary school	19	12.6
Middle school	24	15.9
High school	11	7.3
University and above	10	6.6
Profession		
Not working (Male)	26	17.2
Housewife	68	45.0
Officer	1	0.7
Labourer	5	3.3
Self-employment	10	6.6
Retired	41	27.2
Employment Status		
Yes	16	11.3
No	134	88.7
Income Status		
Income more than expenditure	16	10.6
Income equals expenditure	70	46.4
Income less than expenditure	65	43.0
Social Security Status		
Yes	79	52.3
No	72	47.7
Place of Residence		
Province	45	29.8
District	56	37.1
Town	15	9.9
Village	35	23.2
Patient Age	$\bar{X} \pm ss$ (Min-Max)	
	69.64 ± 5.81 (60-94)	

X: Mean, SD: Standard Deviation.

Results

It was found that 52.3% of the patients in the study sample were male, 96.7% were married, 15.9% were secondary school graduates, 45% were housewives, 88.7% were unemployed, 46.4% had an economic status perception of income equal to expenses, 52.3% had social security, 37.1% lived in a district, and the mean age of the patients was 69.64 ± 5.81 (Table 1).

It was determined that 35.1% of the patients underwent surgery in the field of general surgery, 58.3% had at least one chronic disease, 35.1% had hypertension in addition to the disease for which they underwent surgery, and the mean number of hospital stay days was 6.33 ± 3.84 (Table 2).

When examining the comparison of the mean scores of care burden and psychological resilience according to the descriptive characteristics of the caregivers in Table 3, it was found that the difference in the mean scores of the care burden scale according to the place of residence was statistically significant ($P < 0.01$), and the difference in the mean scores of psychological resilience according to the variables of occupation and caregiver working status was statistically

Table 2. Number and Percentage Distribution of Patients According to Clinical Characteristics (n = 151)

Features	Number	Percentage
	n	%
Type of Surgery Performed on the Patient		
Cardiovascular surgery	25	16.6
General surgery	53	35.1
Urology surgery	10	6.6
Ear, nose, and throat surgery	8	5.3
Orthopedic surgery	26	17.2
Brain surgery	3	2.0
Other (Thoracic Surgery, Eye Surgery, Plastic Surgery)	26	17.2
Presence of any chronic disease		
Yes	88	58.3
No	63	41.7
Type of chronic disease		
HT	32	21.2
DM	12	7.9
HT+DM	8	5.3
COPD	11	7.3
Other	25	16.6
None	63	41.7
Length of hospital stay (day)	$\bar{X} \pm ss$ (Min-Max)	
	6.33 ± 3.84 (1-23)	

HT: Hypertension, DM: Diabetes Mellitus, COPD: Chronic Obstructive Pulmonary Disease.

Table 3. Mean Care Burden Scale and Psychological Resilience Scale Scores According to Caregiver Descriptive Characteristics (n = 151)						
Features	Number/Percentage		Care Burden	Test and Significance	Psychological Resilience	Test and Significance
	n	%	$\bar{X} \pm ss$		$\bar{X} \pm ss$	
Gender						
Female	91	60.3	31.91 ± 7.11	t=0.85	17.07 ± 3.55	t=-0.97
Male	60	39.7	30.98 ± 6.11	P=0.39	17.07 ± 2.99	P=0.33
Marital Status						
Single	46	69.5	32.54 ± 7.27	t=-1.15	16.86 ± 4.31	t=1.01
Married	105	30.5	31.10 ± 6.46	P=0.25	17.46 ± 2.81	P=0.31
Education Status						
Illiterate	4	2.6	29.75 ± 8.26		18.50 ± 4.65	
Literate	9	6.0	31.00 ± 11.57		16.77 ± 4.71	
Primary education	16	10.6	32.50 ± 7.75	F=0.51	17.06 ± 3.45	F=0.69
Middle school	26	17.2	32.84 ± 6.39	P=0.76	16.38 ± 3.38	P=0.62
High school	54	35.8	31.64 ± 6.22		17.44 ± 3.37	
High school and above	42	27.8	30.52 ± 5.87		17.71 ± 2.81	
Profession						
Not working (Male)	15	9.9	29.06 ± 4.36		17.26 ± 3.10	F=3.12
Housewife	54	35.8	32.64 ± 7.18		17.03 ± 3.45	P=0.00**
Officer	28	18.5	29.21 ± 6.38		18.46 ± 2.23	
Labourer	15	9.9	31.13 ± 5.91		16.66 ± 3.84	
Self-employed	19	12.6	32.31 ± 7.11	F=1.55	18.73 ± 3.36	
Student	16	10.6	33.87 ± 6.99	P=0.16	14.75 ± 3.33	
Other	4	2.6	30.75 ± 6.80		18.00 ± 0.81	
Income Status						
Income more than expenditure	17	11.3	30.17 ± 6.45		18.94 ± 2.92	
Income equals expenditure	77	51.0	32.09 ± 7.19	F=0.67	17.27 ± 3.72	F=2.73
Income less than expenditure	57	37.7	31.21 ± 6.15	P=0.51	16.80 ± 2.76	P=0.06
Social Security						
Yes	91	60.3	31.07 ± 6.24	t=-1.04	17.45 ± 2.99	t=0.74
None	60	39.7	32.25 ± 7.40	P=0.29	17.27 ± 3.82	P=0.45
Place of Residence						
Province	48	31.8	33.41 ± 6.74		16.64 ± 3.44	
District	70	46.4	30.92 ± 6.61	F=4.07	17.54 ± 3.43	F=1.03
Town	11	7.3	34.09 ± 5.90	P=0.00**	16.72 ± 2.86	P=0.27
Village	22	14.6	28.13 ± 6.00		18.13 ± 2.89	
Family Type						
Nuclear family	101	66.9	31.69 ± 6.36	t=0.38	17.17 ± 3.01	t=-0.50
Extended family	50	33.1	31.24 ± 7.45	P=0.69	17.50 ± 3.94	P=0.61

(Continued)

Table 3. Mean Care Burden Scale and Psychological Resilience Scale Scores According to Caregiver Descriptive Characteristics (n = 151) (Continued)

Features	Number/Percentage		Care Burden	Test and Significance	Psychological Resilience	Test and Significance
	n	%	$\bar{X} \pm ss$		$\bar{X} \pm ss$	
Your Degree of Closeness with the Patient						
Son/daughter	108	71.5	31.30 ± 6.49		17.07 ± 3.26	
Spouse	8	5.3	32.25 ± 6.60	F = 0.99	17.37 ± 2.44	F = 0.45
Daughter-in-law	20	13.2	33.95 ± 7.89	P = 0.41	17.90 ± 3.64	P = 0.76
Brother	3	2.0	29.00 ± 9.53		18.66 ± 4.72	
Other	12	7.9	29.83 ± 6.22		17.75 ± 4.02	
Do you have any illness/health problems						
Yes	9	6.0	30.44 ± 6.06	t = -0.50	18.55 ± 3.77	t = 1.17
No	142	94.0	31.61 ± 6.78	P = 0.61	17.20 ± 3.31	P = 0.24
Disease/health problem						
Hypertension	5	3.3	31.20 ± 7.79		20.00 ± 4.35	
Diabetes Mellitus	4	2.6	29.50 ± 3.87	F = 0.19	16.75 ± 2.21	F = 1.75
None	142	94.0	31.61 ± 6.78	P = 0.82	17.20 ± 3.31	P = 0.17
Caregiver Age			32.38 ± 8.63	r = -0.12 P = 0.11		r = 0.14 P = 0.07

X: Mean, SD: Standard Deviation, r: correlation, F: One Way Analysis of Variance (ANOVA), t: Student T-test. *P < 0.05. **P < 0.01.

the difference in the mean care burden scores according to the place of residence between the groups was due to those living in the province compared to the village ($P < 0.01$). In addition, after Tukey's further analysis among the occupational groups, it was seen that the difference in the mean psychological resilience scores was due to the self-employed and civil servant groups compared to the student group ($P < 0.01$). It was determined that there was no statistically significant difference ($P > 0.05$) in the mean scores of care burden and psychological resilience according to other categorical variables (Table 3). No significant difference was found in the examination of the difference between the categorical variables and the mean scores of the Burden of Care Scale and Psychological Resilience Scale according to the caregiving process characteristics of the caregiver ($P > 0.05$). However, when examining the relationship between continuous variables and the total score of the Burden of Care Scale and Psychological Resilience Scale, a very weak but significant negative relationship was found between the duration of caring for the patient ($r = -0.20$, $P < 0.01$) and the time spent caring for the patient in the hospital ($r = -0.17$, $P < 0.05$) and psychological resilience (Table 4).

In the examination of the relationship between the age and length of hospitalization of the patients and the total scores of the care burden and psychological resilience scales of the caregivers, a very weak positive significant relationship ($r = 0.25$) was found between age and care burden ($P < 0.01$). A very weak negative significant relationship ($r = -0.22$) was found between the length of hospital stay and psychological resilience ($P < 0.01$) (Table 5).

The study determined that the mean Care Burden Scale score of the caregivers of elderly surgical patients was 31.53 ± 8.94 , indicating a mild level, and the mean score of Psychological Resilience was

found between care burden and psychological resilience, which was statistically significant ($P < 0.01$) ($r = -0.34$) (Table 6).

Discussion

Caregivers of elderly patients after surgical intervention can be affected by the physical and psychosocial aspects of the caregiving process. This present study showed that caregivers' caregiving burden was mild and their psychological resilience was moderate. It was found that as the care burden increased, the psychological resilience levels of caregivers decreased.

When previous studies in the literature were analyzed in terms of patient and caregiver descriptive characteristics, findings similar to our study indicated that caregivers were predominantly women, housewives, had no basic level of education, and the majority of them were unemployed.^{13,14} On the other hand, in line with details in other studies, it is observed that the caregivers who support the results of the study are mostly women, and the care recipients are men.¹⁵ In most societal cultures, caregiving is perceived as the role of women, especially in the family.^{14,16,17}

In the study, no significant difference was found between the averages of the care burden scale and the gender, marital status, educational status, family type, and whether the caregiver had social security. When the literature is examined, some studies have similar results to this study and support present findings.^{14,18} In present study, the relationship between caregiver burden and the variable age was analyzed, and it was found that there was no significant relationship. However, a study conducted by Gbiri et al¹⁹ also found results supporting the relationship between age and caregiver burden.

Table 4. Mean Care Burden Scale and Psychological Resilience Scale Scores According to Caregiver Descriptive Characteristics (n=151)

Features	Number/ Percentage		Care Burden $\bar{X} \pm ss$	Test and Significance	Psychological Resilience $\bar{X} \pm ss$	Test and Significance
	n	%				
Are there other individuals at home who you are obliged to care for?						
Yes	18	11.9	32.33 ± 6.89	t=0.53	17.88 ± 3.81	t=0.81
No	133	88.1	31.43 ± 6.72	P=0.59	17.20 ± 3.28	P=0.41
Who are the individuals you are obligated to care for at home?						
Child	14	9.3	32.50 ± 7.27		17.71 ± 3.19	
Parent	6	4.0	32.83 ± 5.30	F=0.28	18.16 ± 4.87	F=0.36
None	131	86.8	31.38 ± 6.75	P=0.75	17.19 ± 3.30	P=0.69
Do you receive support from other family members in caring for the patient?						
Yes	83	55.0	31.74 ± 6.69		17.21 ± 3.32	
No	26	17.2	30.65 ± 5.73	F=0.27	17.26 ± 2.90	F=0.05
Sometimes	42	27.8	31.69 ± 6.72	P=0.76	17.42 ± 3.69	P=0.94
What problems did you experience during your hospital stay?						
I don't have any problems	37	24.5	29.70 ± 7.03		18.05 ± 2.76	
I had to go home to meet my needs	27	17.9	32.77 ± 7.21		17.92 ± 3.58	
Issues related to food	30	19.9	32.83 ± 6.45		16.73 ± 3.89	
Issues related to sleep	33	21.9	30.81 ± 6.01	F=1.61	17.18 ± 3.16	F=1.33
Issues related to worship	12	7.9	30.25 ± 7.74	P=0.15	15.83 ± 3.68	P=0.25
Issues related to transport	12	7.9	34.50 ± 4.90		17.42 ± 2.74	
Time spent dealing with patient care			145.11 ± 95.32	r=0.09 P=0.24		r=-0.20 P=0.01**
Duration of hospital care						
Minimum time spent			8.81 ± 3.56	r=-0.00 P=0.96		r=-0.17 P=0.03*
Maximum time spent			14.32 ± 25.12	r=0.05 P=0.54		r=0.02 P=0.74

X: Mean, SD: Standard Deviation, r: Correlation, F: One Way Analysis of Variance (ANOVA), t: Student's T-test. *P < 0.05; **P < 0.01.

When the literature was examined, another study was found that supported the statistical significance of the difference between the mean scores of the care burden scale according to place of residence and the descriptive and clinical characteristics of the caregivers in the present study.²⁰ In the present study, the burden of care was found to be higher for those living in the town. It is interpreted that the relatives of patients living in the town are far

from the hospital in terms of transport facilities, which affects the burden of care.

According to the results of the study, caregiver burden increases as the age of the patient increases. Similar studies have found that age groups and care burden affect each other, and care burden increases with increasing age.^{21,22} As the age of the patients increases, it is

Table 5. Examination of the Relationship Between Mean Scores of Care Burden and Psychological Resilience with Patients' Age and Length of Hospitalization (n=151)

	Patient Age		Length of Hospital Stay	
Care Burden	r=0.25	P=0.00**	r=0.13	P=0.08
Psychological Resilience	r=-0.00	P=0.97	r=-0.22	P=0.00**

r: Correlation, *P < 0.05, **P < 0.01.

Table 6. Examination of the Relationship Between Care Burden and Psychological Resilience in Patient Caregivers (n=151)

	Possible Range	$\bar{X} \pm ss$	Actual Range	Test and Significance
Care Burden	0-88	31.53 ± 8.94	0-61	r=-0.34
Psychological Resilience	6-30	17.29 ± 3.35	9-26	P=0.00**

X: Mean, SD: Standard Deviation, r: Correlation, *P < 0.05, **P < 0.01.

thought that the physical symptoms of aging and the emergence of comorbidities, along with the difficulty in meeting self-care needs, lead to an increase in the responsibilities of caregivers.

Similar to the results of this study, in a study conducted by Erkuş with caregivers of patients diagnosed with chronic psychiatric conditions, psychological resilience levels were found to be high and significant in the full-time and civil servant occupational group.²³ These results suggest that working caregivers with a certain income level may experience a positive impact on their psychological resilience in terms of finding a potential source of support in the future.

No study investigating the relationship between the duration of caregiving and psychological resilience was found in the literature. However, a study conducted by Unsar et al²⁴ associated an increase in the duration of caregiving with an increase in caregiver anxiety and depression scores. These results show that prolonged caregiving creates a psychologically negative situation, supporting our study findings.

In the study, it was determined that caregivers of elderly surgical patients had mild mean scores on the Care Burden Scale and moderate mean scores on the Psychological Resilience Scale. As a result of the correlation analysis between the scales, a negative, weak relationship was observed between care burden and psychological resilience, which was statistically significant. This study showed that the burden of families caring for elderly surgical patients is generally low and psychological resilience is moderate. In this sense, our findings regarding the negative aspects of caregiving are consistent with other studies that suggest the lower the resilience, the higher the perceived burden.^{25,26} In our cultural context, where family structure is the basic building block, one possible explanation is that the perceived burden of caregiving is higher among family caregivers, which may lead them to experience some negative psychological effects such as depression. This is consistent with previous studies that have shown psychological distress, characterized by high levels of anxiety and depression, is directly related to the level of caregiver burden.^{13,24,27}

Limitations

This study had some limitations. First, given its cross-sectional design, caregiver levels of anxiety, depression, or fatigue were not examined before the study began, which may have affected the relationship between variables. Second, caregiver burden in the study was reported only by caregivers of elderly patients, which may not accurately reflect family functioning and may lead to objective error. Because care burden was not assessed from the perspectives of caregivers and other family members, there is a possibility of bias. Finally, the sample size in this study was limited to two hospitals in a province in southeastern Türkiye, which may limit the generalizability of the results. Because of this limitation, it is possible that some relationships between variables could not be detected, so further studies with larger samples are needed.

Conclusion

Surgical treatment of an elderly person in the family affects the relationships and roles between family members, who play an essential role in the care process. While providing care to these patients in the pre-discharge and post-discharge periods, especially in the early postoperative period, caregivers experience a burden of care that cannot be ignored.

The study results emphasize the necessity for increased awareness of the influence of surgery on caregivers of elderly patients and the

need for programs to support caregivers in preparing them for post-discharge care and to maintain psychological support as needed. These factors should be provided to caregivers of elderly surgical patients through pre-operative information programs and psychological support as part of counseling programs. Evidence-based studies with more cases are recommended to increase the generalizability of the findings. Additionally, new studies can be conducted to investigate whether interventions aimed at reducing the care burden are effective in increasing psychological resilience levels. It could be beneficial to develop strategies to reduce daily care hours to more manageable levels and to investigate the effects of these strategies on psychological resilience.

Ethics Committee Approval: Ethics committee approval was obtained from Mardin Artuklu University Non-invasive Clinical Research Ethics Committee (Approval Number: 2022/12-13, Date: 13.10.2022).

Informed Consent: Informed consent was obtained from all individual participants involved in the study.

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