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Vesile Adıgüzel, Funda Gümüş & Musa Şahpolat

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The Impact of Caregiver Burden Levels of Primary Caregivers of Oncology and Psychiatry Patients on Anxiety and Depressive Ratings: A Comparative Study

[1]Vesile Adıgüzel, (corresponding author)
[1]Yalova University, Faculty of Health Sciences, Department of Nursing, Department of Psychiatric Nursing, Yalova/Turkey
+90 551 593 21 00
vesile.adiguzel@yalova.edu.tr
https://orcid.org/0000-0002-9722-3491

[2]Funda Gümüş,
[2]Dicle University, Faculty of Atatürk Health Sciences, Department of Nursing, Dicle University, Diyarbakir/Turkey.
+90 533 687 68 61
fcamuz@hotmail.com
https://orcid.org/0000-0002-3827-0909

[3]Musa Şahpolat
[3]Yalova University, Faculty of Medicine, Department of Mental Health and Diseases, Yalova/Turkey
+90 507 751 76 06
musa.sahpolat@yalova.edu.tr
https://orcid.org/0000-0002-0022-2389

Abstract

Background: This study aimed to examine the association between caregiver burden and anxiety and depressive symptoms among primary caregivers of oncology patients and patients with severe mental illness.

Methods: This descriptive, correlational, and comparative study was conducted between 15 August and 15 October 2025. The sample comprised 100 primary caregivers of outpatients, including 50 caregivers of oncology patients and 50 caregivers of psychiatric patients. Data were collected using a Personal Information Form, the Zarit Burden Interview (ZBI), the Beck Anxiety Inventory (BAI), and the Beck Depression Inventory (BDI). Descriptive statistics (mean, standard deviation, frequency, and percentage) were calculated. Group comparisons and associations were examined using ANOVA, Pearson correlation, and simple linear regression. Statistical significance was set at $p<0.05$.

Results: There were statistically significant differences between groups in caregiver burden (ZBI), anxiety (BAI), and depression (BDI) scores ($p<0.05$). Caregivers of psychiatric patients reported higher ZBI, BAI, and BDI scores than caregivers of oncology patients. In the psychiatric caregiver group, higher caregiver burden was positively associated with higher anxiety levels ($\beta=0.472$, $p<0.05$), and the model explained 35.8% of the variance. Similarly, higher caregiver burden was positively associated with higher depressive symptom levels ($\beta=0.289$, $p<0.05$), with the model explaining 28.3% of the variance ($R^2=0.283$).

Conclusion: Primary caregivers of psychiatric patients experienced greater caregiver burden, anxiety, and depressive symptoms than primary caregivers of oncology patients. Psychiatric nurses should plan and implement interventions focused on psychoeducation, stress management, crisis management, and communication skills to reduce caregiver burden and related psychological symptoms.

Keywords: Oncology, Psychiatry, Caregiver burden, Anxiety, Depression

Introduction

Care provided by family members and close relatives in the management of chronic physical and mental illnesses constitutes one of the fundamental components of health services. However, the continuity, intensity, and unpredictability of the caregiving process may give rise to a multidimensional stress condition in caregivers, defined as “caregiver burden” (1). Caregiver burden is described as a cumulative process encompassing caregivers’ accumulating strains over time across physical, emotional, social, and economic domains (1).

The Stress Process Model conceptualizes caregiver burden as a dynamic construct emerging from the interaction between illness-specific primary stressors (e.g., symptom severity, functional impairments, and behavioral problems) and secondary stressors linked to the caregiving role (role conflicts, economic pressures, and social constraints). In this process, the level of social support and individual coping resources play a decisive role (2). This theoretical framework emphasizes that caregiver burden is not limited to the quantitative aspects of caregiving activities but represents a complex experience that also includes the caregiver’s subjective appraisals (2,3). In the literature, caregiver burden is generally addressed within the framework of objective and subjective components: objective burden refers to the time, task, and cost dimensions of care, whereas subjective burden reflects the cognitive and emotional distress experienced by the caregiver in response to these demands (3). Systematic reviews and meta-analyses indicate that subjective caregiver burden, in particular, is strongly and consistently associated with anxiety and depressive symptoms and constitutes an important risk factor for the development of depressive symptomatology (4,5).

In Türkiye, patient care is known to be largely undertaken by family members. Although the caregiving role often begins on a voluntary basis, as the process becomes prolonged it may impose an increasing burden on caregivers’ physical, emotional, and social resources (6). It has also been reported that these difficulties experienced by caregivers adversely affect the quality of life of care recipients (7). In oncology, caregiving involves high levels of stress due to treatment-related toxicities, substantial symptom burden, uncertainties regarding the course of the illness, and end-of-life care needs. Among caregivers of patients with cancer, the prevalence of depression and anxiety has been reported as 42.3% and 46.6%, respectively (8). Furthermore, caregiving alone, longer duration of caregiving, financial difficulties, and inadequate social support have been shown to be associated with depressive and anxiety symptoms (9,10).

In psychiatric illnesses, the caregiving process is typically long-term, variable, and unpredictable. Behavioral symptoms, recurrent crises, nonadherence to treatment, limited insight, and social stigma are among the main factors that increase caregiver burden (11). The prevalence of caregiver burden among caregivers of individuals with mental illness has been reported as 31.7%; moreover, caregivers of patients diagnosed with psychosis have been shown to experience higher levels of burden and psychological distress (11). Recent studies demonstrate that illness-specific characteristics—such as symptom stability, medication adherence, and level of insight—are important determinants of the association between caregiver burden and anxiety and depressive symptoms (12). In addition, affiliate stigma and experiences of agitation or violence have been reported to adversely affect caregivers’ psychological outcomes (13,14).

In conclusion, caregiving in the context of chronic physical illnesses and severe mental disorders entails both shared and context-specific challenges for caregivers. Whereas prolonged and uncertain treatment trajectories and the management of physical symptoms are prominent in oncology (15), in psychiatric illnesses recurrent crises, behavioral problems, social stigma, and the need for continuous role adjustment markedly shape the caregiving experience (16–19). However, studies directly comparing caregiver burden profiles and concomitant anxiety and depressive symptoms among caregivers in oncology and psychiatry are limited. Addressing this gap will contribute to identifying which caregiver group is at greater psychological risk and to developing targeted intervention priorities. Accordingly, comparative studies will provide important contributions to a better understanding of caregivers’ needs and to strengthening health and social support policies.

Accordingly, this study aims to contribute to the literature by examining the effect of caregiver burden levels on anxiety and depressive symptoms among primary caregivers of oncology and psychiatric patients.

H_0: There is no statistically significant difference between primary caregivers of oncology patients and primary caregivers of psychiatric patients in terms of caregiver burden, anxiety, and depressive symptom levels.

H_1: There is a statistically significant difference between primary caregivers of oncology patients and primary caregivers of psychiatric patients in terms of caregiver burden, anxiety, and depressive symptom levels.

Mehods

This study employed a cross-sectional, descriptive, correlational, and comparative design.

Sample and Participants

The study was conducted between 15 August and 15 October 2025 in the oncology and psychiatry outpatient clinics of a training and research hospital among relatives of patients receiving outpatient follow-up for a medical diagnosis. The hospital was selected based on the researcher’s ease of access to participants and the clinical team’s willingness to collaborate. The study population consisted of relatives of patients attending these outpatient clinics. The sample size was determined prior to data collection using Power Analysis & Sample Size (PASS, version

11.0.10). For a correlation test, the required minimum sample size was calculated as 100, with a power of 80% and an alpha level of 0.05. Accordingly, using purposive sampling, 50 relatives of oncology patients and 50 relatives of psychiatry patients who met the eligibility criteria were included in the study. One caregiver relative was recruited for each patient. The inclusion criteria were: being aged 18 years or older; having no personal diagnosis of any psychiatric disorder or chronic physical illness; having no hearing or comprehension difficulties; being able and willing to communicate; providing informed consent; and being the primary caregiver of a patient who had received either (i) a diagnosis of a severe mental disorder according to DSM-5 criteria (bipolar disorder, schizophrenia, or schizoaffective disorder) or (ii) a diagnosis of a common stage III cancer (breast, colon, lung, or ovarian cancer). In addition, care recipients were required to be followed as outpatients and to be receiving standard pharmacological treatment and routine clinical follow-up.

Data Collection

Data were collected via face-to-face interviews with primary caregivers of patients diagnosed with schizophrenia, schizoaffective disorder, or bipolar disorder, and with primary caregivers of patients diagnosed with stage III breast, colon, lung, or ovarian cancer, at the institution where permissions had been obtained. Patient files were reviewed first. Subsequently, with the support and guidance of the psychiatrists and oncologists working at the institution, caregivers who agreed to participate were interviewed by the researcher (VA) in an empty outpatient clinic room. Each interview lasted approximately 15–20 minutes. Some caregivers completed the study forms independently, whereas others requested that the researcher read the items aloud and assist in recording their responses. Clinical information on the patients' diagnoses was verified in the medical records. Although 11 caregivers initially met the eligibility criteria, they were not included for various reasons: 4 declined to participate, two reported needing to pick up their children from school, one stated they had to prepare a meal, and 4 returned incomplete forms. Data collection was terminated once the target sample size was reached.

Data Collection Tools

Study data were collected using a Personal Information Form, the Zarit Burden Interview (ZBI), the Beck Anxiety Inventory (BAI), and the Beck Depression Inventory (BDI).

Personal Information Form

The form consists of two sections. The first section includes seven items assessing patients’ individual characteristics (e.g., sex, age, marital status, time since first diagnosis) (16). The second section includes nine items assessing primary caregivers’ characteristics (e.g., sex, age, marital status, co-residence status), yielding a total of 16 items (20).

Zarit Burden Interview (ZBI)

The ZBI was developed by Zarit, Reever, and Bach-Peterson (1980), and its validity and reliability in Turkish were established by İnci and Erdem (2008). The scale can be self-administered by caregivers or administered by the researcher and comprises 22 items that assess the impact of caregiving on the caregiver’s life. Items are rated on a 5-point Likert scale ranging from 0 (“never”) to 4 (“nearly always”), producing a total score between 0 and 88. Higher scores indicate greater perceived burden, with commonly used score ranges interpreted as 0–20: no burden, 21–40: mild burden, 41–60: moderate burden, and 61–88: severe burden. Reported internal consistency coefficients range between 0.87 and 0.99 (21). In the present study, the ZBI demonstrated excellent internal consistency (Cronbach’s α = 0.96).

Beck Anxiety Inventory (BAI)

The BAI was developed by Beck to evaluate anxiety and to capture its cognitive and somatic components. It is a 21-item, Likert-type self-report measure. The first Turkish validity and reliability study was conducted by Ulusoy et al. (1998); the reported test–retest reliability coefficient was

0.57, and the scale was considered suitable for anxiety severity rating and treatment monitoring. In the Turkish adaptation, Cronbach's alpha was reported as 0.93. Respondents rate each item using four response options (e.g., "Not at all," "Mildly," "Moderately," "Severely"). Total scores range from 0 to 63, with higher scores indicating more severe anxiety. Commonly used severity bands are 0–7 minimal/normal, 8–15 mild, 16–25 moderate, and 26–63 severe, with a cut-off point of 15 suggested in Turkish validation work (22). In the present study, internal consistency was high (Cronbach's $\alpha = 0.94$).

Beck Depression Inventory (BDI)

The BDI is a 21-item self-report inventory designed by Beck et al. (1961) to assess the severity of depressive symptoms. Hisli conducted the Turkish validity and reliability study (23). The purpose of the inventory is not to establish a clinical diagnosis of depression, but to quantify the intensity of depressive symptoms; higher scores reflect greater symptom severity. Each item is scored from 0 to 3, with total scores ranging from 0 to 63. Severity levels are commonly interpreted as 0–9: minimal/normal, 10–18: mild, 19–29: moderate, and 30–63: severe depressive symptoms (23). In the present study, internal consistency for the BDI was acceptable-to-good (Cronbach's $\alpha = 0.89$).

Data Analysis

All statistical analyses were performed by the researchers using IBM SPSS for Windows (SPSS Statistics Base v23, IBM). Descriptive statistics were computed to summarize participants' demographic and baseline characteristics, including frequency (n), percentage (%), mean ($\bar{X}$), and standard deviation (SD). The chi-square (χ^2) test was used to examine group differences and to assess homogeneity/independence among categorical variables. Pearson correlation analysis was conducted to evaluate linear associations between continuous variables. Skewness and kurtosis values were within ±3, indicating that the data were approximately normally distributed. Simple linear regression analyses were performed. Cronbach's alpha coefficients were calculated to evaluate the internal consistency reliability of the scales. Statistical significance was set at $p < 0.05$.

Ethical Considerations

The study was conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval was obtained from Yalova University Non-Interventional Research Ethics Committee (12 July 2024; No. 156), and written institutional permission was granted by the relevant Provincial Directorate of Health (14 August 2025; E-51301208-605-285158630). Participants were informed about the study aims and invited to participate. Voluntary participation was ensured using an informed consent form consistent with the Helsinki Declaration Principles, and both verbal and written consent were obtained. For participants who did not wish to provide written consent, verbal consent only was obtained.

Results

The sociodemographic characteristics of the primary caregiver participants are presented in Table 1. Regarding age distribution, 70% of caregivers in the oncology group were ≤53 years old, whereas 74% of caregivers in the psychiatric group were >53 years old. In the oncology group, 30% of caregivers were homemakers, while 40% of caregivers in the psychiatric group were retired. In terms of economic status, 68% of caregivers in the oncology group reported that their income equaled expenses, whereas 46% of caregivers in the psychiatric group reported that their income exceeded expenses. With respect to kinship to the patient, 42% of caregivers in the oncology group and 52% of caregivers in the psychiatric group (n=26) were the patient’s child. Co-residence differed between groups: 58% of oncology caregivers and 86% of psychiatric caregivers lived with the patient (Table 1).

Clinical and sociodemographic characteristics of the care recipients are shown in Table 2. The mean age of oncology patients was 52.8±11.5 years, and that of psychiatric patients was 55.3±8.92 years. More than half of oncology patients (56%) and nearly two-thirds of psychiatric patients (68%) were male. Most oncology patients were married (70%), whereas the majority of psychiatric patients were single (80%). With respect to age at illness onset, 76% of oncology patients had onset at ≥40 years, while 46% of psychiatric patients had onset between 21 and 29 years. Most patients were not employed: 92% in the oncology group and 70% in the psychiatric group. Regarding educational level, 22% of oncology patients were high school graduates, whereas 32% of psychiatric patients were middle school graduates. Diagnostic distribution indicated that among oncology patients, breast cancer accounted for 36%, colon cancer for 32%, lung cancer for 24%, and ovarian cancer for 8%. Among psychiatric patients, 66% were diagnosed with schizophrenia, 20% with schizoaffective disorder, and 14% with bipolar disorder (Table 2).

Mean scale scores are summarized in Table 3. Among caregivers of oncology patients, the mean total score was 23.2±11.3 on the Zarit Burden Interview (ZBI), 11.3±8.5 on the Beck Anxiety Inventory (BAI), and 9.4±6.3 on the Beck Depression Inventory (BDI). Among caregivers of psychiatric patients, the corresponding mean scores were substantially higher: 53.3±14.9 (ZBI), 28.5±11.8 (BAI), and 19.0±8.1 (BDI). Group differences in ZBI, BAI, and BDI scores were statistically significant ($p<0.05$), indicating greater caregiver burden, anxiety, and depressive symptoms among caregivers of psychiatric patients compared with caregivers of oncology patients (Table 3).

Pearson correlation analyses are reported in Table 4. In the oncology caregiver group, caregiver burden (ZBI) was positively correlated with anxiety (BAI) ($r=0.512$, $p<0.05$) and depression (BDI) ($r=0.407$, $p<0.05$). Anxiety (BAI) was also positively correlated with depression (BDI) ($r=0.634$, $p<0.05$). Similarly, in the psychiatric caregiver group, ZBI was positively correlated with BAI ($r=0.598$, $p<0.05$) and BDI ($r=0.532$, $p<0.05$), and BAI was strongly positively correlated with BDI ($r=0.756$, $p<0.05$) (Table 4).

Regression analyses are presented in Table 5. The model assessing the effect of group on caregiver burden (ZBI) was statistically significant ($F = 128.038$, $p <0.05$). Compared with psychiatric caregivers, oncology caregivers had ZBI scores that were, on average, approximately 30 points lower ($\beta = -30.100$, $p < 0.05$). The model explained 56.6% of the variance in ZBI scores. The model testing the effect of group on anxiety (BAI) was also significant ($F=70.239$, $p<0.05$), indicating that oncology caregivers scored, on average, approximately 17 points lower than psychiatric caregivers ($\beta=-17.240$, $p<0.05$), with 41.7% of the variance explained. Finally, the model examining the effect of group on depressive symptoms (BDI) was significant ($F=43.303$, $p<0.05$). Oncology caregivers scored, on average, approximately 10 points lower than psychiatric caregivers ($\beta = -9.600$, $p < 0.05$), and the model explained 30.6% of the variance in BDI scores (Table 5).

Discussion

Although caregiving is often perceived as a voluntary responsibility, prolonged and intensive caregiving demands may reduce caregivers' physical and psychological resilience. In both oncology and psychiatric settings, this process may be associated with increased stress, social withdrawal, and various psychological difficulties (24–26).

In the present study, caregivers of psychiatric patients had significantly higher caregiver burden (ZBI), anxiety (BAI), and depressive symptom (BDI) scores than caregivers of oncology patients ($p<0.05$). Although direct comparative studies are limited, this finding is generally consistent with previous research indicating higher burden and psychological distress among caregivers of individuals with mental disorders. In Türkiye, Dikeç et al. (2018) reported a positive association between family burden and anxiety among caregivers of individuals with mental disorders (16). Similarly, Cham et al. (2022) demonstrated elevated burden levels among caregivers of individuals with mental illness in a meta-analysis (11), while Alqahtani et al. (2021) reported higher anxiety and stress levels among caregivers of patients with schizophrenia (27). These differences may be related to the chronic course, behavioral unpredictability, and social stigma frequently associated with psychiatric disorders. However, because potential confounding variables were not controlled for in the present study, these findings should be interpreted cautiously. Therefore, the observed group differences should not be considered evidence of an independent effect of caregiving context alone.

Caregiver burden among oncology caregivers was also notable. Previous studies have shown that role conflict, disruption in daily routines, and changes in working life may contribute to emotional and social difficulties in this group (28). In addition, Ünsar et al. (2021) reported that some caregivers interpret caregiving within a cultural framework of duty and responsibility, which may reduce the subjective perception of burden even when caregiving demands are substantial (20). This suggests that caregiver burden may be shaped not only by the objective intensity of care but also by the meaning attributed to the caregiving role.

In both groups, increased caregiver burden was associated with higher anxiety and depressive symptoms. This finding is consistent with previous studies conducted among both oncology and psychiatric caregivers (10,11,20,29). Large-scale studies have also shown that caregiver burden is associated with moderate-to-severe depression and anxiety (12). In addition, social support has been identified as a protective factor associated with lower caregiver burden and fewer depressive symptoms (27,30,31). Nevertheless, these associations should be interpreted with caution, since caregiver age, gender, relationship to the patient, co-residence status, and socioeconomic characteristics may also have influenced the findings. Because these variables were not examined in adjusted models, it is not possible to conclude that caregiving burden is independently associated with anxiety or depressive symptoms in this sample.

From a clinical perspective, the present findings indicate that caregivers, particularly those involved in psychiatric care, may represent a psychologically vulnerable group who could benefit from closer psychosocial follow-up. In clinical settings, routine screening of caregivers for burden, anxiety, and depressive symptoms during outpatient follow-up or discharge planning may help identify those at increased risk. In addition, structured and brief nursing interventions focusing on coping strategies, communication skills, symptom management, recognition of crisis signs, task-sharing within the family, and referral to appropriate support services when needed may be useful in reducing caregiver strain and supporting caregivers' functional capacity. Such concrete and family-centered interventions may contribute not only to caregiver well-being but also to continuity and quality of patient care.

Conclusion

This study showed that primary caregivers of psychiatric patients had higher caregiver burden, anxiety, and depressive symptom scores than primary caregivers of oncology patients. However, these findings should be interpreted cautiously, as the analyses were unadjusted and do not indicate an independent effect of caregiving context alone. Comparative examination of the psychological impacts across caregiver groups may inform both mental health professionals and policymakers. Within this framework, psychiatric nursing assumes an essential professional role by conceptualizing care not solely as a patient-centered process, but as one that also encompasses the family and the caregiver. Psychiatric nurses can contribute by routinely screening caregivers for burden, anxiety, and depressive symptoms to facilitate early identification, and by planning interventions that emphasize psychoeducation, coping skills for stress, crisis management, and communication skills. In addition, ensuring sustainable caregiver support may require the implementation of pathways for family counseling aimed at reducing stigma, referral to peer or support groups, coordination with social services (including financial and respite-care support), and rapid referral to mental health services when indicated (24, 26). Overall, structured psychiatric nursing interventions have the potential to strengthen caregivers' psychological well-being and, indirectly, to contribute to continuity of care and the patient's recovery process (32).

Limitations

This study has several limitations. First, the data were collected using self-report scales, which may be affected by social desirability, recall bias, and individual differences in perception. Second, the data were obtained from a single center, which limits the generalizability of the findings. Third, it was not assessed whether the caregivers received any professional in-home caregiving support. Fourth, participants' prior life experiences and their potential influence on the caregiving process were not taken into account.

Fifth, the analyses in this study were based on unadjusted comparisons, and potential confounding variables were not statistically controlled for. Although no significant differences were found between the groups in terms of gender, marital status, and educational level, differences in occupation, income level, co-residence with the patient, and degree of kinship may also have influenced caregiver burden and psychological symptoms. Therefore, the observed group differences should be interpreted with caution and should not be considered evidence of an independent effect of disease group or caregiving context alone. In other words, the findings may reflect not only the type of illness involved but also the sociodemographic and relational characteristics of the caregivers.

Sixth, the study had a cross-sectional and observational design. Therefore, the findings should not be interpreted as causal, but rather as associations and group differences observed at a single point in time. In this study, the psychiatry and oncology groups were compared conceptually on the basis of shared stress-related characteristics such as uncertainty, intense emotional labor, care coordination, role burden, and chronic stress processes. However, the nature of caregiver burden may vary according to clinical context. In oncology settings, periods of intensive treatment, symptom management, and uncertainty related to disease trajectory and mortality may be more prominent, whereas in severe mental disorders, long-term or recurrent illness course, functional impairment, behavioral crises, treatment adherence difficulties, and stigma-related stressors may contribute to a more chronic and fluctuating pattern of caregiver burden.

In addition, caregivers in both groups may share the experience of caring for a relative facing serious illness, suicide risk, or mortality risk through different mechanisms. Therefore, the findings should not be interpreted as indicating that one group directly causes a greater burden than the other, but rather as context-specific patterns observed across two different caregiving settings. Overall, this study showed that primary caregivers of psychiatric patients had higher caregiver burden, anxiety, and depressive symptom scores than primary caregivers of oncology patients; however, these findings should not be interpreted as evidence of an independent effect.

Declarations

 Abbreviations:

ZBI: Zarit Burden Interview

BAI: Beck Anxiety Inventory

BDI: Beck Depression Inventory

● **Ethics approval and consent to participate:** The study was conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval was obtained from Yalova University Non-Interventional Research Ethics Committee (12 July 2024; No. 156), and written institutional permission was granted by the relevant Provincial Directorate of Health (14 August 2025; E-51301208-605-285158630). All participants were informed about the study, and written informed consent was obtained from each participant.

● **Consent for publication:** Not applicable

● **Availability of data and materials:** All data generated or analyzed during this study are included in this published article and its supplementary information files. No additional external datasets were used.

● **Competing Interests:** There is no conflict of interest between the authors.

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● **Authors' contributions:** Concept and design: F.G., V. A. Data collection: F.G., V. A. Data analysis and interpretation: F.G., V. A., M.Ş. Manuscript writing: F.G., V. A. Critical review: F.G., V. A.

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Table 1. Distribution of the Participants According to Their Demographic Characteristics

Variables		Oncology		Mental Disorder		p
		n	%	n	%	
Gender	Woman	29	58.0	31	62.0	0.683
	Male	21	42.0	19	38.0	
Age ($\bar{X}$±SS, 53.18±15.76)	53 years and under	35	70.0	13	26.0	**0.000** *
	Over 53 years	15	30.0	37	74.0	
Marital Status	Married	35	70.0	31	62.0	0.398
	Single	15	30.0	19	38.0	
Educational Status	Illiterate	3	6.0	4	8.0	0.734
	Primary Education	10	20.0	9	18.0	
	Secondary Education	2	4.0	5	10.0	
	High School	18	36.0	14	28.0	
	University	17	34.0	18	36.0	
Occupations	Unemployed	8	16.0	1	2.0	**0.007** *
	Housewife	15	30.0	16	32.0	
	Civil servant	10	20.0	6	12.0	
	Worker / Manual laborer	5	10.0	7	14.0	
	Retired	8	16.0	20	40.0	
	Self-employed	4	8.0	0	0.0	
Income Status	Income less than expenses	11	22.0	5	10.0	**0.000** *
	Income equal to expenses	34	68.0	22	44.0	
	Income greater than expenses	5	10.0	23	46.0	
Relationship to	Spouse	18	36.0	9	18.0	
	Child	21	42.0	26	52.0	

the Patient	Relative/ Friend	0	0.0	15	30.0	**0.000 ***
	Other	11	22.0	0	0.0	
Living with the Patient	Yes	29	58.0	43	86.0	**0.002 ***
	No	21	42.0	7	14.0	
Presence of Chronic Illness	Yes	10	20.0	4	8.0	0.084
	No	40	80.0	46	92.0	
Toplam		**50**	**100.0**	**50**	**100.0**	

Table 2. Characteristics of the Patients

Variables	Oncology		Mental Disorder	
	Min-Max	**Mean±S.D**	**Min-Max**	**Mean±S.D**
Age	44-75	52.8±11.5	20-72	55.3±8.92
	n	**%**	**n**	**%**
Gender				
Woman	22	44	16	32
Male	28	56	34	68
Marital Status				
Single	15	30	40	80
Married	35	70	10	20
Age at Onset of Illness				
8–15 years	0	0	5	10
16–20 years	0	0	12	24
21–29 years	0	0	23	46
30–39 years	12	24	8	16
40 years and above	38	76	2	4
Employment Status				
Yes	4	8	15	30
No	46	92	35	70
Educational Status				
Illiterate	5	10	2	4
Literate	9	18	4	8
Primary School	7	14	11	22
Middle School	10	20	16	32
High School	11	22	10	20

University	8	16	7	14
Diagnosis of Illness				
Breast cancer Colon cancer Lung cancer Ovarian cancer	18 16 12 4	36 32 24 8		
Schizophrenia Schizoaffective disorder Bipolar disorder			33 10 7	66 20 14

Table 3. Comparison of the Participants' Scale Scores by Groups

Variables	**Oncology**		**Mental Disorder**		**t**	**p**
	Min-Max	**Mean±SD**	**Min-Max**	**Mean±SD**		
Zarit Burden Interview (ZBI)	0.0-58.0	23.2±11.3	27.0-79.0	53.3±14.9	-11.315	**0.000***
Beck Anxiety Inventory (BAI)	0.0-36.0	11.3±8.5	8.0-51.0	28.5±11.8	-8.381	**0.000***
Beck Depression Inventory (BDI)	0.0-28.0	9.4±6.3	5.0-36.0	19.0±8.1	-6.580	**0.000***

Min: Minimum, Max: Maksimum, SD: Standart Deviation

*p<0.05

Table 4. Correlations Among the Scales Used in the Study

Variables		**Oncology**			**Mental Disorder**		
		1	**2**	**3**	**1**	**2**	**3**
1- Zarit Burden Interview (ZBI)	r	1.000	0.512	0.407	1.000	0.598	0.532
	p	-	**0.000***	**0.000***	-	**0.000***	**0.000***
	r		1.000	0.634		1.000	0.756

2- Beck Anxiety Inventory (BAI)	p		-	**0.000***		-	**0.000***
3- Beck Depression Inventory (BDI)	r			1.000			1.000
	p			-			-

*p<0.05

Table 5. Results of the Regression Analysis

Model	**Dependent Variable**	**Independent Variable**	**β**	**Standard Error**	**Beta**	**t**	**p**	**F**	**p**	R^2
1	Zarit Burden Interview (ZBI)	Constant	53.300	1.881	-	28.336	**0.000***	128.038	**0.000***	0.566
		Group (Oncology & Mental Disorder =ref)	-30.100	2.660	-0.753	-11.315	**0.000***			
2	Beck Anxiety Inventory (BAI)	Constant	28.560	1.455	-	19.635	**0.000***	70.239	**0.000***	0.417
		Group (Oncology & Mental Disorder =ref)	-17.240	2.057	-0.646	-8.381	**0.000***			
3	Beck Depression Inventory (BDI)	Constant	19.040	1.032	-	18.457	**0.000***	43.303	**0.000***	0.306
		Group (Oncology & Mental Disorder =ref)	-9.600	1.459	-0.554	-6.580	**0.000***			

*p<0.05