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Supportive Care Needs and Coping Self-Efficacy Among Caregivers of Patients with Cancer: A Cross-Sectional Study

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Research Article

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Abstract

Purpose

This study aimed to examine the relationship between supportive care needs and coping self-efficacy among caregivers of patients with cancer. The research question focused on whether supportive care needs are associated with caregivers' coping self-efficacy levels.

Methods

This descriptive, cross-sectional, and correlational study was conducted with 65 caregivers of oncology patients receiving treatment at the chemotherapy unit and medical oncology clinic of a tertiary hospital between January and July 2024. Data were collected using a Participant Information Form, the Supportive Care Needs Survey for Caregivers (SCNSC-TR), and the Coping Self-Efficacy Scale (CSES). Data were analyzed using descriptive statistics, independent samples t-test, one-way analysis of variance (ANOVA), and Pearson correlation analysis.

Results

Caregivers reported moderate levels of supportive care needs (94.17 ± 32.31) and coping self-efficacy (29.25 ± 11.81). A statistically significant, moderate, and positive correlation was found between supportive care needs and coping self-efficacy ($P < .05$). As caregivers' supportive care needs increased, their coping self-efficacy levels also increased.

Conclusion

The findings indicate that caregivers of patients with cancer experience moderate supportive care needs and coping self-efficacy, and these variables are positively associated. Addressing caregivers' needs through structured psychosocial support may enhance their coping capacities and improve caregiving outcomes.

Relevance to research, policy, and/or programs:

These findings emphasize the importance of integrating caregiver-focused supportive care assessments into oncology services. Developing psychoeducational and counseling programs led by oncology nurses and consultation-liaison psychiatric nurses may strengthen caregivers' coping skills and contribute to holistic cancer care delivery.

Introduction

Cancer remains one of the leading causes of morbidity and mortality worldwide, with increasing incidence and prolonged survival rates due to advances in early diagnosis and treatment [1, 2]. As cancer care has increasingly evolved into a chronic care model, family caregivers have become integral to patient care, assuming essential roles across the entire disease trajectory [3, 4]. Caregivers provide not only physical assistance and symptom management but also emotional, social, and practical support, often at the expense of their own well-being [5, 6].

The caregiving process in oncology is frequently associated with substantial physical, psychological, social, and financial burden. Previous studies have shown that caregivers of patients with cancer commonly experience anxiety, depression, fatigue, and social isolation, as well as disruptions in occupational and family roles [7–9]. These multidimensional challenges highlight the importance of addressing caregivers' needs as an integral component of comprehensive cancer care [10–12].

Supportive care, defined as the provision of services aimed at meeting the physical, emotional, informational, and social needs of patients and their families, has gained increasing attention in oncology [13–15]. Identifying and addressing unmet supportive care needs is essential, as these needs are closely associated with poorer psychological outcomes, reduced quality of life, and ineffective coping [16, 17]. Caregivers frequently report unmet needs related to healthcare services, information, emotional support, and social functioning [18, 19].

Coping self-efficacy, reflecting an individual's confidence in managing stressors, is a key determinant of caregivers' adaptation to the demands of cancer care [20, 21]. Higher coping self-efficacy has been associated with better psychological adjustment, lower distress, and improved caregiving outcomes [22, 23]. In contrast, low coping self-efficacy is linked to maladaptive coping strategies, increased psychological distress, and poorer well-being [20, 24].

Although supportive care needs and coping self-efficacy have been widely studied separately in oncology populations, research examining their relationship among caregivers remains limited and inconsistent [25]. Understanding this relationship is essential for developing targeted, caregiver-centered interventions that both address unmet needs and enhance coping capacity.

Therefore, this study aimed to examine the relationship between supportive care needs and coping self-efficacy among caregivers of patients with cancer. The findings are expected to contribute to the development of evidence-based supportive care strategies and inform oncology nursing practice by emphasizing the integration of caregiver-focused assessments and interventions into routine cancer care.

Materials and Methods

Study Design

This study was designed as a descriptive, cross-sectional, and correlational study.

Sample and Setting

The study was conducted with caregivers of patients diagnosed with cancer who were receiving treatment at the chemotherapy unit and medical oncology clinic of a a training and research hospital in Türkiye between January 1, 2024, and July 15, 2024.

The sample consisted of 65 caregivers who met the inclusion criteria and agreed to participate in the study. Inclusion criteria were being aged 18 years or older, being the primary caregiver of a patient diagnosed with cancer, and being able to communicate effectively. Caregivers with diagnosed psychiatric disorders or those unwilling to participate were excluded from the study.

The statistical power of the study was calculated using G*Power version 3.1. Based on a sample size of 65 participants, an effect size of 0.454, and a significance level of 0.05, the post hoc power of the study was determined to be 99%, indicating that the sample size was sufficient to detect statistically significant effects.

Data Collection Tools

Participant Information Form: This form was developed by the researchers based on the literature and included questions regarding caregivers' socio-demographic characteristics (e.g., age, gender, relationship to the patient, and duration of caregiving) [19].

Supportive Care Needs Survey for Caregivers (SCNSC-TR): The Supportive Care Needs Survey for Caregivers, developed by Girgis et al., consists of 39 items and four subscales: "Psychological and Emotional Needs," "Health Care and Information Needs," "Work and Social Needs," and "Communication and Family Needs" [26]. The scale is scored by averaging the scores given to the items in each sub-dimension. Higher scores indicate greater supportive care needs. In the Turkish adaptation study, the Cronbach's alpha coefficient was reported as 0.95, demonstrating that the scale is a valid and reliable measurement tool [27]. In the present study, Cronbach's alpha coefficients for the subscales were 0.876 (Health Care Service Needs), 0.903 (Psychological and Emotional Needs), 0.884 (Work and Social Needs), and 0.852 (Information Needs). The overall Cronbach's alpha coefficient was 0.956, indicating that the scale has high internal consistency.

Coping Self-Efficacy Scale (CSES): The scale, developed by Schroder and Ollis, is a self-report measurement tool designed to assess individuals' perceived coping efficacy in dealing with feelings of helplessness and failure [28]. It consists of a single dimension with a total of 12 items. As the items are negatively worded, lower scores indicate higher levels of coping self-efficacy.

The version of the scale used in this study was adapted into Turkish by Akın et al. [29]. The Cronbach's alpha coefficient of the scale was reported as 0.89, indicating good internal consistency. In the present study, the Cronbach's alpha coefficient was calculated as 0.883, demonstrating that the scale is reliable.

Data Collection Procedure

Data were collected through face-to-face interviews conducted in the oncology units. Caregivers who met the inclusion criteria were informed about the purpose of the study, and written informed consent was obtained prior to participation. The questionnaires were completed in approximately 15–20 minutes.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 22.0. Descriptive statistics (mean, standard deviation, frequency, and percentage) were used to summarize the data. Independent samples t-test and one-way analysis of variance (ANOVA) were used to compare group differences. Pearson correlation analysis was performed to examine the relationship between supportive care needs and coping self-efficacy. Statistical significance was set at $P < .05$.

Results

Participant Characteristics

A total of 65 caregivers were included in the study. The majority were female (63.1%), aged between 36 and 50 years (49.2%), and were the patients' children (55.4%). Additionally, 33.8% of caregivers reported providing care for more than 12 hours per day (Table 1).

Table 1
Characteristics of caregivers (n = 65)

Variable		n	%
Gender	Female	41	63.1
	Male	24	36.9
Age (years)	18–35	19	29.2
	36–50	32	49.2
	51–64	10	15.4
	≥ 65 years	4	6.2
Relationship to patient	Eş	14	21.5
	Çocuk	36	55.4
	Diğer	15	23.1
Marital status	Married	48	73.8
	Single	17	26.2
Educational status	Primary school	12	18.5
	Secondary school	4	6.2
	High school	20	30.8
	Bachelor’s degree and above	29	44.6
Income level	Low	7	10.8
	Moderate	35	53.8
	High	23	35.4
Employment status	Employed	33	50.8
	Unemployed	32	49.2
Living arrangement	Living alone	4	6.2
	Living with family members	61	93.8
Type of cancer	Gastrointestinal	35	53.8
	Urological	6	9.2
	Lung	19	29.2
	Breast	5	7.7

Variable		n	%
Cancer stage	Stage I	5	7.7
	Stage II	5	77
	Stage III	27	41.5
	Stage IV	28	43.1
Time since diagnosis	0–1 year	42	64.6
	2–10 years	23	35.4
Presence of another caregiver	Yes	48	73.8
	No	17	26.2
Daily caregiving duration	≤ 12 hours	43	66.2
	> 12 hours	22	33.8
Chronic disease status	No	57	87.7
	Yes	8	12.3
Type of chronic disease	Hypertension	1	12.5
	Cardiovascular diseases	1	12.5
	Respiratory diseases	1	12.5
	Rheumatic diseases	2	25
	Thyroid diseases	3	37.5

(Table 1 here)

Supportive Care Needs and Coping Self-Efficacy

The mean total score of the Supportive Care Needs Survey for Caregivers was 94.17 ± 32.31, indicating a moderate level of supportive care needs. When the subscale scores were examined, the mean scores were 28.42 ± 10.28 for Health Care Service Needs, 31.55 ± 12.46 for Psychological and Emotional Needs, 14.49 ± 7.01 for Work and Social Needs, and 19.71 ± 6.96 for Information Needs.

The mean Coping Self-Efficacy Scale score was 29.25 ± 11.81, suggesting that caregivers had a moderate level of coping self-efficacy (Table 2).

Table 2
Supportive care needs and coping self-efficacy scores

SCNSC	Number of Items	Mean	SD	Min	Max
	39	**94.17**	**32.31**	**40**	**174**
Health Care Service Needs	11	28.42	10.28	11	50
Psychological and Emotional Needs	14	31.55	12.46	14	67
Work and Social Needs	7	14.49	7.01	7	34
Information Needs	7	19.71	6.96	8	35
CSES	**12**	**29.25**	**11.81**	**12**	**67**

(Table 2 here).

Relationship Between Supportive Care Needs and Coping Self-Efficacy

A statistically significant, moderate, and positive correlation was found between supportive care needs and coping self-efficacy ($P < .05$). As supportive care needs increased, coping self-efficacy levels also increased (Table 3).

Table 3
Correlation between supportive care needs and coping self-efficacy

		CSES
Health Care Service Needs	r	0.361
	p	**0.003**
Psychological and Emotional Needs	r	0.419
	p	**0.001**
Work and Social Needs	r	0.479
	p	**< 0.001**
Information Needs	r	0.342
	p	**0.005**
SCNSC	r	0.454
	p	**< 0.001**
r: Pearson Correlation Analysis		

(Table 3 here).

Discussion

This study examined the relationship between supportive care needs and coping self-efficacy among caregivers of patients with cancer. The findings revealed that caregivers experienced moderate levels of supportive care needs and coping self-efficacy, and a significant positive relationship was identified between these variables.

Caregivers reported moderate levels of supportive care needs, which is consistent with previous studies demonstrating that caregivers of patients with cancer frequently experience unmet needs across psychological, informational, and social domains [5, 6, 25]. Among the subdimensions, psychological and emotional needs had the highest mean score, suggesting that caregivers are particularly vulnerable to emotional distress during the caregiving process. This finding is consistent with the literature, which highlights the substantial psychological burden associated with cancer caregiving, including increased levels of anxiety, depression, and emotional distress [30–32].

The coping self-efficacy levels of caregivers in this study were found to be moderate. This result is in line with previous research suggesting that caregivers often struggle to effectively manage the psychological and practical demands of caregiving, particularly in the context of chronic and life-threatening illnesses such as cancer [23]. Moderate levels of coping self-efficacy may reflect both the adaptive efforts of caregivers and the ongoing challenges they face throughout the disease trajectory. Higher coping self-efficacy has been associated with better stress management, reduced burnout, and improved psychological well-being [22]. Conversely, caregivers with lower coping self-efficacy may be more likely to use maladaptive coping strategies such as avoidance, denial, and withdrawal [20, 24].

A key finding of this study was the significant positive correlation between supportive care needs and coping self-efficacy. Similarly, positive correlations were observed across all subdimensions of supportive care needs, with the strongest association found in the work and social needs domain. At first glance, this positive relationship may appear counterintuitive, as unmet needs are often expected to be associated with poorer coping outcomes. However, this finding may indicate that caregivers who are more aware of their needs and actively engaged in the caregiving process also develop stronger coping capacities. Increased caregiving involvement may enhance caregivers' problem-solving skills, help-seeking behaviors, and psychological adaptation over time.

This interpretation is supported by the literature indicating that coping is influenced not only by stress exposure but also by cognitive appraisal and access to support systems [22, 23]. Caregivers who recognize their needs may be more likely to seek support, utilize healthcare services, and adopt adaptive coping strategies. Therefore, higher reported needs may reflect increased awareness and engagement rather than vulnerability alone. In addition, caregivers who receive psychoeducation and counseling support may develop more effective coping strategies over time [33].

From a clinical perspective, these findings highlight the importance of routine assessment of caregivers' supportive care needs in oncology settings. Oncology nurses and consultation-liaison psychiatric nurses (CLPH) play a crucial role in identifying unmet needs and providing tailored interventions, such as psychoeducation, emotional support, and counseling [34]. Addressing caregivers' needs may not only improve their well-being but also enhance the quality of care provided to patients.

Strengths and Limitations

This study contributes to the limited literature examining the relationship between supportive care needs and coping self-efficacy among caregivers of patients with cancer. The use of validated measurement tools and the inclusion of multiple dimensions of supportive care needs strengthen the reliability of the findings.

However, several limitations should be acknowledged. The cross-sectional design prevents causal inferences, and the study was conducted in a single center with a relatively small sample size, which may limit generalizability. Future studies with larger samples and longitudinal designs are recommended.

Implications for Practice and Research

The findings of this study emphasize the importance of integrating caregiver-focused assessments into routine oncology care. Developing structured interventions targeting both supportive care needs and coping self-efficacy may improve caregivers' psychological well-being and caregiving outcomes.

Future research should explore longitudinal relationships between these variables and evaluate the effectiveness of intervention programs designed for caregivers.

Conclusion

This study demonstrated that caregivers of patients with cancer experience moderate levels of supportive care needs and coping self-efficacy, and that there is a significant positive relationship between these variables. Among the supportive care needs, psychological and emotional needs emerged as the most prominent domain, highlighting the substantial emotional burden experienced by caregivers.

The positive association between supportive care needs and coping self-efficacy suggests that caregivers who are more engaged in the caregiving process may develop greater awareness of their needs and stronger coping capacities. This finding underscores the complex and dynamic nature of caregiving, where increased demands may simultaneously challenge and strengthen caregivers' coping mechanisms.

From a clinical perspective, these findings emphasize the importance of integrating caregiver-focused assessments into routine oncology care. Addressing caregivers' supportive care needs through

structured interventions, such as psychoeducation and counseling, may enhance coping self-efficacy and improve both caregiver well-being and patient care outcomes.

Future research should focus on longitudinal and interventional studies to better understand the causal pathways between supportive care needs and coping self-efficacy and to develop evidence-based programs tailored to caregivers of patients with cancer.

Declarations

Competing Interests

The authors have no relevant financial or non-financial interests to disclose.

Ethics approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Karabük University Non-Interventional Clinical Research Ethics Committee (Decision No: 2022/1180). Written informed consent was obtained from all participants prior to data collection.

Consent to participate

Informed consent was obtained from all individual participants included in the study.

Consent to publish

The authors confirm that all data were collected anonymously and no identifiable personal information of participants is included in this manuscript. Therefore, consent for publication was not required.

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Author Contribution

All authors contributed to the study conception and design. SF: Conceptualization, Methodology, Data Analysis, Writing – Review & Editing, Supervision. MM: Conceptualization, Methodology, Data Collection, Data Analysis, Writing – Original Draft. All authors read and approved the final version of the manuscript.

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Data Availability

The data that support the findings of this study are available from the corresponding author, SF, upon reasonable request. The corresponding author had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

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