Research

Psikiyatride Güncel Yaklaşımlar-Current Approaches in Psychiatry 2026; 18(Suppl 1):442-459

doi: 10.18863/pgy.1997187

Resilience and Well-Being Levels in Patients Diagnosed with Cancer and Influencing Factors

Kanser Tanısı Alan Hastalarda Yılmazlık, İyi Oluş Düzeyleri ve Etkileyen Faktörler

Merve Atalay[1], Saliha Hallaç[1],

[1]Akdeniz University, Antalya

ABSTRACT

Objective: The aim of this study is to determine the levels of resilience and well-being in patients diagnosed with cancer, and the factors influencing these levels.

Method: This study has a cross-sectional, descriptive and correlational quantitative research design. It was conducted with 360 patients who met the inclusion and exclusion criteria along with a diagnosis of cancer. Data were collected using the "Individual Descriptive Characteristics Form," the "Resilience Scale," and the "Psychological Well-being Scale."

Results: The mean well-being score of the patients was 47.83±7.32, and the mean resilience scale score was 191.97±26.47. Patients who had a university degree or higher, were single, lived in the city center, and perceived themselves as having a support system had higher resilience. Patients who were employed and perceived themselves as having a good economic situation had higher psychological well-being and resilience. A weak and negative correlation was found between the time to diagnosis and both psychological well-being (r:-.167) and resilience (r: -.141). A significant, positive and strong correlation was found between the patients' resilience levels and their well-being levels (r: .610).

Conclusion: Patients showed high levels of resilience and well-being. Resilience and well-being have a strong, positive impact on one another. The time taken to receive a diagnosis has a weak, negative impact on both resilience and well-being.

Keywords: Resilience, well-being, cancer, psychiatric nursing

ÖZ

Amaç: Çalışmanın amacı kanser tanısı alan hastaların yılmazlık, iyi oluş düzeylerinin ve etkileyen faktörlerin belirlenmesidir.

Yöntem: Bu çalışma kesitsel, tanımlayıcı ve ilişkisel tipte niceliksel araştırma deseniyle gerçekleştirilmiştir. Çalışmaya dahil etme ve dışında tutma kriterlerine uyan 360 kanser tanılı hasta katılmıştır. Veriler, Hastaları Tanıtıcı Özellikler Formu, Yılmazlık Ölçeği ve Psikolojik İyi Oluş Ölçeği kullanılarak toplanmıştır.

Bulgular: Hastaların iyi oluş puan ortalamasının 47,83±7,32, yılmazlık ölçeği puan ortalamasının 191,97±26,47 olduğu saptanmıştır. Üniversite ve üstü mezunu, bekar, şehir merkezinde yaşayan ve destek kaynağı olduğunu algılayan hastaların yılmazlıkları; çalışan ve ekonomik durum algısı iyi olan hastaların hem yılmazlık hem psikolojik iyi oluşları anlamlı düzeyde daha yüksektir. Tanı alma süresi ile hem psikolojik iyi oluş (r:-,167) hem yılmazlık (r:-,141) arasındaki negatif yönlü zayıf bir ilişki saptanmıştır. Hastaların yılmazlık düzeyleri ve iyi oluş düzeyleri arasında anlamlı, pozitif yönlü ve güçlü bir ilişki bulunmuştur (r: ,610).

Sonuç: Hastaların yılmazlık ve iyi oluş düzeyleri yüksektir. Yılmazlık ve iyi oluş birbirini güçlü ve pozitif yönlü etkilemektedir. Tanı alma süresi hem yılmazlık hem iyi oluşu zayıf ve negatif yönlü olarak etkilemektedir.

Anahtar sözcükler: Yılmazlık, iyi oluş, kanser, psikiyatri hemşireliği

Address For Correspondence: Saliha Hallaç, Akdeniz University, Faculty of Nursing, Department of Psychiatric Nursing, Antalya, Türkiye

e-mail: saliha.alkan@gmail.com

Received: 17.07.2026 | **Accepted:** 03.10.2026

Introduction

The World Health Organization (WHO 2025) emphasizes that cancer is a disease characterized by uncontrolled cell growth and affects individuals' lives in multifaceted ways. According to the 2024 report of the Global Cancer Monitoring Center (GLOBOCAN) produced by the International Agency for Research on Cancer (IARC) approximately 20.6 million new cancer cases and 9.8 million cancer-related deaths occurred worldwide (Sung et al. 2026). The number of new cancer cases per year is projected to reach approximately 35 million by 2050 (Bray et al. 2024, Sung et al. 2026). Globally, breast cancer is the most common cancer in women and lung cancer is the most common in men in terms of incidence and mortality (IARC 2024, Sung et al. 2026).

Cancer, by its very nature and the meaning attached to it, highlights a person's mortality and is therefore accompanied by various existential fears and experiences (Caruso and Breitbart 2020). This existential experience can lead individuals to experience a sense of ambivalence, characterized by a constant fluctuation between positive thoughts and feelings such as hope and meaning, and negative feelings and thoughts such as isolation, uncertainty, grief, and sadness. This situation, related to one's perspective on cancer, can be seen as a response to questioning the meaning and value of people's lives and coping with existential challenges (Carreno and Eisenbeck 2022). Coping skills can be enhanced with improved personal resources or environmental support and transformed into adaptive responses (Fereidouni et al. 2024).

Physical symptoms observed after diagnosis vary depending on the type of disease and the treatment method. Fatigue, weight loss, pain, loss of appetite, nausea, hair loss, weakened immune system, and sleep disturbances are the most commonly observed symptoms (Singer et al. 2018, National Cancer Institute 2025). Chemotherapy, radiotherapy, or surgical interventions can significantly reduce an individual's physical functionality, both in terms of the course of the disease and treatment-related side effects (National Cancer Institute 2025). In addition to physical symptoms, a cancer diagnosis has significant effects on the psychosocial level. Individuals frequently experience anxiety, depression, hopelessness, decreased self-esteem, and fears about the future (Kibralew et al. 2025). Furthermore, the illness can weaken social relationships; leading to changes in family roles, increased economic burdens, and social isolation. Patients and their relatives experience some emotional distress due to the physical and neuropsychiatric effects of cancer and its treatments, changes in their work and family lives, and the fear of disease recurrence (Forbes et al. 2024). The economic burden of cancer can often be further increased by factors such as low income, lack of health insurance, and insufficient or absent support resources (Singer et al. 2018). Therefore, cancer is considered not only a biological disease but also a multifaceted life crisis with psychological, social, and economic aspects (Roberts et al. 2018).

The ability to cope with this complex process and manage the crisis situation is associated with the development of individuals' personal resources and psychosocial resilience (Fereidouni et al. 2024). Reducing the perceived threat posed by the disease and developing a positive outlook towards the disease process (Wolyniec et al. 2022, Valentine et al. 2024, Shabanloei et al. 2025), life goals (Park et al. 2008, Park et al. 2019), thoughts and feelings about cancer and its treatment, past experiences, sociocultural attitudes, daily activities, identity perception, social support systems in their environment, accompanying physical and psychological symptoms (Luthar et al. 2000, Gizir 2007, Deshields et al. 2016) all influence coping skills. Studies highlight that individuals who have access to social support resources, exhibit social support-seeking behavior, and utilize positive coping strategies experience positive effects on their resilience and well-being (Seiler and Jenewein 2019, Festerling et al. 2023, Schellekens et al. 2024). Patients' feelings of optimism, self-esteem, sense of control, and perception of social support (Hou and Lam 2014), as well as existential anxieties arising from differences in how they perceive the illness according to their social and individual beliefs, vary from person to person and also affect their well-being and resilience (Deshields et al. 2016).

"Resilience" and "well-being" can be considered among two important indicators of coping. Well-being is related to “how a person acquires knowledge of well-being about themselves and their life, and what the criteria for the truth of this knowledge are.” Knowledge of well-being relies on both subjective components,

such as inner awareness and experience, and objective components, such as empirical indicators that provide quantitative data. According to Ryff (2014), "well-being is a measure for improving mental health and quality of life." Factors influencing well-being are defined as: environmental control, personal growth, purpose in life, autonomy, self-acceptance, and forming positive relationships. In this respect, it indicates that well-being has a multi-layered structure. In their meta-analysis study, Zhu et al. (2024) highlighted age, education level, disease uncertainty, hope level, psychological distress, self-efficacy, social support, and adaptive coping styles as factors affecting cancer adaptation and well-being. The psychosocial adaptation of cancer patients is influenced by physiological, individual, family, and societal factors. In addition to clinical and sociodemographic characteristics, unmet supportive care needs of patients emerge as a risk factor that directly threatens well-being. Patients whose physical, psychological, and practical needs are not met during the treatment process experience significant declines in their psychological well-being (Osowiecka et al. 2025).

Resilience is defined as "the process and outcome of successfully adapting to difficult or challenging life experiences through mental, emotional, and behavioural flexibility and adaptability to external and internal demands" (Luo et al. 2020, American Psychological Association 2026). Resilience is an individual's capacity to adapt and maintain functionality in the face of stress, trauma, or adverse life circumstances (Connor and Davidson 2003). It is a dynamic mechanism that can be influenced over time by changing living conditions, one's environment, how one interprets these changes in one's own situation, and how one responds to the impact of these differences on their life (Masten et al. 2021). In a meta-analysis by Seiler and Jenewein (2019), it was found that cancer patients who possessed protective factors for resilience, such as meaning and purpose in life, a sense of consistency, optimism, positive emotions, self-esteem, self-efficacy, cognitive flexibility, coping skills, social support, and spirituality, successfully adapted to their situation.

Nurses can help cancer patients identify and intervene in the changes they experience, restructure their lives, prepare for and adapt to their experiences (Lyu et al. 2024), and enhance their well-being, coping capacity, and resilience by assisting them in finding meaning and structuring their experiences (Quinto et al. 2022, Ulibarri-Ochoa et al. 2024). While the available literature shows a growing number of studies examining resilience, well-being, and influencing factors separately in patients with cancer, studies that examine both variables together are limited. This study is unique in that it examines the experiences of female and male patients with different types of cancer during their illness and treatment process, in relation to well-being, resilience, and the factors influencing them, in a holistic manner, and can make a significant contribution to the literature and professionals in the field of oncology by providing data. In this context, the aim of this study is to examine the experiences of patients diagnosed with cancer during their illness and treatment process, to determine their levels of resilience and well-being, the correlation between these two variables, and the factors influencing them. In line with this aim, the study hypothesizes that patients diagnosed with cancer will exhibit high levels of resilience and well-being, that there is a positive correlation between these two variables, and that patients' resilience and well-being levels will vary according to sociodemographic characteristics (gender, educational status, marital status, employment status, perceived economic status, place of residence, perceived support, and age) and illness-related characteristics (cancer type and duration since diagnosis).

Method

This study was conducted using a cross-sectional, descriptive, and correlational quantitative research design between January and September 2016 at the Medical Oncology outpatient clinic, inpatient clinic, and Chemotherapy unit of Akdeniz University. Patients whose treatments are planned at the polyclinic are referred to the outpatient Chemotherapy Unit for day-care chemotherapy, or to the Medical Oncology clinic if they will receive inpatient treatment, according to their medical condition and protocols. In the outpatient clinic, patients and/or their relatives receive training from oncology education nurses in education rooms, in accordance with treatment protocols. In the chemotherapy unit, an oncology team consisting of physicians, nurses, psychologists, and pharmacists works on a rotating basis. Nurses conduct brief consultations and provide training based on the patient's needs. Moreover, psychosocially

supportive music and art activities are organized periodically. Nursing services in inpatient clinics encompass routine inpatient care and treatment practices.

Sample

The study population consisted of 5748 patients who applied to the Medical Oncology Outpatient Clinic of Akdeniz University within one year and were diagnosed with cancer codes between C.00 and C.80 according to the ICD-10 classification system. The sample size was calculated using the sample size formula for known populations. Based on a 95% confidence level, a 5% sampling error, and p=0.50 and q=0.50 values that provide the maximum sample size when the incidence of the event is unknown, the minimum sample size required for the study was determined to be approximately 360 patients (Sümbüloğlu and Sümbüloğlu 2012). A total of 360 patients were included in this study. 360 patients met both inclusion (knowing and stating that they had a cancer diagnosis, being literate, being 18 years of age or older, volunteering, not having hearing, speech or comprehension impairments, and not being in the terminal stage) and exclusion (being in an experimental study) criteria for the study. The total number of patients interviewed to reach the sample size during the study period was 411, and 51 of these patients were excluded from the sample based on inclusion and exclusion criteria. The statistical power of the study was evaluated using post-hoc (actual power) analysis with the G Power 3.1 program. In the analysis, the t-tests – Correlation: Point biserial model was selected, and a two-sided testing approach was used. The effect size (|ρ|) was set at 0.61, the significance level α at 0.05, and the total sample size n at 360. As a result of the analysis, the degrees of freedom (df) were calculated as 358, the critical t-value as 1.967, and the non-centrality parameter (δ) as 14.606. Based on these parameters, the achieved statistical power of the study was found to be 100% ($1-\beta = 1.00$).

Procedure

The principles of the Declaration of Helsinki were adhered to in this study (WMA 2025). Written institutional permission was obtained from the Akdeniz University Division of Medical Oncology, and ethical approval was secured from the Akdeniz University Clinical Research Ethics Committee [Decision No: 321, Date: 11.11.2015] to conduct the study. In this study, data collection and data processing processes were conducted in accordance with the standards of the Law on the Protection of Personal Data. Institutional approval was obtained via a data usage consent form as part of the institutional procedure. To determine the population of the research, information was requested only in numbers. An anonymized dataset, stripped of identifying elements, was created for the statistical analyses of the study. In addition, all patient data and forms are currently being retained by the authors. In this study, written and signed consent was obtained from the patients using an informed consent form. Permissions for the scales used in this study were obtained from the scale owners via email. Support was obtained from a statistics expert for the statistical analyses.

The data were collected face-to-face by the first author using the "Descriptive Characteristics Form," the "Resilience Scale," and the "Psychological Well-Being Scale." During the data collection phase, which constituted the implementation of the study, the first author provided information about themselves and the study upon first meeting the patients and obtained their consent first verbally and then in writing via an informed consent form. Patients who agreed to participate in the study were provided with data collection tools and asked to complete the forms. The patients completed the forms in approximately 30 minutes. During the process of filling out the researcher forms, the researcher waited until the data was secure and took the completed forms under their own control.

Measures

Descriptive Characteristics Form

The researchers developed the demographic characteristics form based on the literature. Studies on factors that may influence patients' resilience and well-being levels have shown that they are related to

age, gender, education, economic status, social support, individuals' perspectives on events, and the meaning they attribute to their illness (Luthar et al. 2000, Gizir 2007, Deshields et al. 2016, Masten et al. 2021). In this context, it consists of a total of 20 questions, including nine on the sociodemographic characteristics of the patients, four on disease and treatment characteristics, and seven open-ended questions regarding their experiences with the disease and treatment process.

Resilience Scale

The resilience scale was developed by Gürgan (2006) to determine the level of resilience. The scale consists of 50 items of the five-point Likert type and is rated as "does not define at all" (1), "defines slightly" (2), "defines moderately" (3), "defines well" (4), and "defines very well" (5). In the scale, 22 items are reverse-scored; the lowest possible score is 50, and the highest is 250. An increase in scores indicates a high level of resilience, while a decrease indicates a low level of resilience. In the original study of the scale, the Cronbach's alpha coefficient was .78 for the first administration and .87 for the second administration (Gürgan 2006). In this study, the Cronbach's alpha coefficient of the resilience scale was calculated as .92.

Psychological Well-Being Scale

The psychological well-being scale was developed by Diener et al. (2009) to measure socio-psychological well-being. The scale was adapted into Turkish by Telef (2013). The scale comprises eight items. The scale is of the seven-point Likert type, and each item is rated as "strongly disagree" (1), "disagree" (2), "somewhat disagree" (3), "undecided" (4), "somewhat agree" (5), "agree" (6), and "strongly agree" (7). All items were positively expressed. The scores range from 8 to 56. A high score indicates that the individual possesses numerous psychological resources and strengths. Although the scale does not provide separate measurements for specific aspects of well-being, it offers a general overview of positive functioning across various domains. The Cronbach's alpha coefficient obtained in the reliability study of the scale was .80 (Telef 2013). In this study, the Cronbach's alpha coefficient for the psychological well-being scale was.84.

Statistical Analysis

The data obtained from the study were evaluated using numbers, percentages, means, and standard deviations. The total scores on the Resilience Scale and the Psychological Well-Being Scale, the study's primary dependent variables, were treated as continuous variables. Parametric tests were used to determine whether these variables differed according to sociodemographic and disease-related characteristics. An independent samples t-test was used to compare the total scores of the Resilience Scale and the Psychological Well-being Scale across dichotomous independent variables (gender, marital status, employment status, and perceived support). One-way analysis of variance (ANOVA) was used to compare the total scores of the Resilience Scale and the Psychological Well-being Scale across independent variables with more than two categories. When a significant difference between groups was identified via ANOVA, the Post-hoc Bonferroni test was applied to determine which groups accounted for the difference. Pearson correlation analysis was used to examine the correlation between continuous variables, such as the time since diagnosis and the total scores on the Resilience Scale and the Psychological Well-being Scale.

The data were analyzed using counts, percentages, means, standard deviations, independent samples t-tests, post-hoc Bonferroni tests, one-way analysis of variance (ANOVA), and Pearson correlation tests. In the tests performed, the margin of error for the significance threshold was set at 0.05 (Jolley 2014). The normality parameters of the general mean scores for -the Resilience Scale and the Psychological Well-being Scale -the study's main variables were examined. The analysis revealed a skewness value of -0.326 and a kurtosis value of 0.179 for the Resilience Scale; for the Psychological Well-being Scale, the skewness value was found to be -1.781 and the kurtosis value 4.690. Therefore, for large samples (N > 300), it is recommended to assess normality using the z-scores of the kurtosis and skewness coefficients. Parametric tests (t-test, ANOVA) can be reliably applied to large samples if the absolute skewness is less than two and the absolute kurtosis is less than seven (Kim 2012). Given the sample size of the current study

(N = 360), it has been confirmed that all obtained kurtosis (4.690 <7) and skewness values meet the respective threshold criteria and do not compromise the robust nature of the parametric tests. For the multiple comparison steps, the post-hoc Bonferroni test was used as the basis. For open-ended questions, the responses provided by patients were grouped using content analysis, and frequency and percentage distributions were calculated and presented as descriptive statistics. Expressions conveying similar meanings were grouped together by the researchers. Expert opinions and recommendations were obtained from three academics in the field of psychiatric nursing regarding the groupings made. Guided by expert opinions, the researchers came together to discuss the groupings and finalize the items.

Results

The vast majority of patients (81.1%) received combined therapy, while 1.1% received only surgical treatment. Nearly three-quarters of the patients (72.2%) stated that they did not experience difficulties during the course of the disease and treatment, while half (54.7%) indicated that changes had occurred in certain areas of their lives (Table 1).

Table 1. Difficulties and changes experienced by patients during the treatment process (N=360)

Variable	n	%
Treatments received for the disease		
Combined treatment	292	81.1
Chemotherapy	64	17.8
Surgery	4	1.1
Experiencing difficulties		
I experience difficulties	100	27.8
Reasons for experiencing difficulties* (n=100)		
Experiencing accommodation and transportation issues	47	47.0
A lack of awareness and difficulty in accessing rights	26	26.0
Institutional communication barriers regarding illness or treatment	19	19.0
Inability to access necessary medications for treatment	18	18.0
Experiencing difficulties in making appointments	12	12.0
I did not experience any difficulties	260	72.2
Change in living situation		
Yes	197	54.7
No	163	45.3
Changes experienced* (n=197)		
Ceasing work	89	45.2
Temporarily staying with someone else due to treatment, care, etc.	70	35.5
Moving to another home	51	25.9
Social isolation	16	8.1
Avoiding social environments	13	6.6
Avoiding social activities due to ostomy bag	2	1.0
Avoiding close contact with people	1	0.5
Physical changes	12	6.1
Hair loss	3	1.5
Visual impairment	2	1.0
Weight loss	2	1.0
Ostomy bag care	2	1.0
Constipation	1	0.5
Sweating	1	0.5
Inability to perform fine motor tasks	1	0.5
Divorce from their spouse	6	3.0

* Multiple choices were allowed. Percentages were calculated based on n.

The difficulties reported by patients included issues regarding accommodation and transportation, a lack of awareness and difficulty in accessing rights related to their illness and treatment, an inability to reach

individuals who could provide institutional support or facilitate communication when facing problems related to the illness or treatment, and difficulties in obtaining necessary medications and scheduling appointments. The changes occurring in their lives were related to issues such as ceasing work, moving to another home, temporarily staying with someone else due to treatment and care processes, social isolation, physical changes, and divorce from their spouse, respectively (Table 1).

Table 2. Patients' views regarding their feelings about themselves, coping behaviors, and life goals during the course of their illness

	Number (n)	Percent (%)
Patients' feelings during illness compared to pre-illness* (n=360)		
Positive emotions	86	23.6
Feeling good	72	20.0
Comfort	9	2.5
Gratitude - Appreciation	3	0.8
Hope	2	0.6
Negative emotions	172	47.8
Bad	42	11.8
Depressive	25	7.0
Stressed	20	5.6
Anxious	20	5.6
Pessimistic	14	3.8
Vulnerable	12	3.3
Dependent - Needy	9	2.5
Obsessive	9	2.5
Regretful	9	2.5
Apathetic / Numb	7	1.9
Uncertainty	5	1.3
Emotions regarding physical appearance and strength	127	35.3
Fatigue	53	14.7
Lethargy	43	27.8
Weakness	19	5.3
Aches and pains	10	2.8
Restlessness	2	0.6
Emotions related to the social and economic situation	47	13.1
Feeling dependent	15	4.1
Feeling a decrease in social life	13	3.6
Facing bankruptcy – Inability to work	13	3.6
Feeling useless and aged	6	1.6
Continuing life as usual	30	8.4
Patients' coping behaviors and initiatives* (n=360)		
Not implementing any practice	104	28.9
Engaging in enjoyable activities	137	38.1
Reading books and newspapers	40	11.1
Watching TV and movies, listening to music	37	10.3
Praying and reading the Quran	29	8.0
Handicrafts and knitting	13	3.6
Housework	9	2.5
Painting	9	2.5
Engaging in sports and physical activities	85	23.6
Walking	57	15.8
Going for walks in open spaces	28	7.8
Spending time with loved ones and relatives	59	16.4
Self-talk, thinking about positive aspects of life, and staying alone	52	14.4
Acting as if not ill, minimizing the effects of the illness	40	11.1
Supporting a healthy diet	13	3.6

Table 2. Patients' views regarding their feelings about themselves, coping behaviors, and life goals during the course of their illness		
	Number (n)	**Percent (%)**
Consuming accessible, good, and fresh food	9	2.5
Regular meals and nutrition	4	1.1
Seeking professional help	6	1.7
Consulting a psychiatrist and using medication	4	1.1
Consulting a psychologist	2	0.6
Presence of life goals (n=360)		
No purpose in life	108	30.0
Presence of a purpose in life	252	70.0
Stating to have acquired a purpose after diagnosis (n=9)	9	3.6
Status of achieving life goals (n=252)		
Achieved	228	90.5
Stating to have achieved all goals	77	33.7
Not achieved	24	9.5
Life goals (n=252)		
Marrying off, educating, raising children/grandchildren, and ensuring their education	126	50.0
Achieving economic goals	60	23.8
Buying a house	35	13.9
Buying a car	22	8.7
Retirement	3	1.2
Overcoming the illness, achieving professional and personal well-being	27	10.7
Having and achieving goals for personal and social development	24	9.5
Developing one's own education and career	11	4.4
Participating in diving and mountaineering courses	3	1.2
Learning handicrafts	3	1.2
Obtaining a driver's license	2	0.8
Learning a foreign language	1	0.4
Improving communication	1	0.4

* Multiple choices were allowed. Percentages were calculated based on n.

Patients spoke of the negative emotions they experienced to a significant extent during the course of the illness. It was determined that some of these negative emotions related to physical appearance and strength (35.3%) and to social and economic status (13.1%). A proportion of patients (8.4%) reported continuing their lives in the same way, despite the absence of emotional expression (Table 2). A total of 28.9% of the patients stated that they did not employ any coping strategies. Patients who took active steps to cope with illness and treatment processes employed methods, such as engaging in enjoyable activities, participating in sports and physical exercises, spending time with loved ones, undertaking activities to foster a positive mindset, using self-suggestion, focusing on positive aspects of life, and receiving nutritional support. A noteworthy finding is that, while 11.1% of patients attempted to cope by acting as if they did not have the disease and down playing its effects, a very small proportion (1.7%) sought to cope by obtaining professional help. The majority of the patients (70%) stated that they had a purpose in life. The vast majority (90.5%) of patients who stated that they had life goals indicated that they had achieved their goals. Among the patients who have realized their life purpose, 33.7% stated that they have achieved all the goals they had set for themselves up to this point. 50% of the patients stated that getting their children married, ensuring their schooling and upbringing, and providing for their education were their life goals (Table 2).

Table 3. Patients' mean scores for psychological well-being and resilience, and the correlation between them		
Scales	**$\bar{X}$ ± SD (minimum - maximum)**	**Scale (minimum - maximum)**
Psychological Well-Being	47.83 ± 7.32 (9 - 56)	8 - 56
Resilience	191.97 ± 26.47 (92 - 248)	50 - 250

* Correlation between Resilience and Psychological Well-Being: r: .610, p < .001

* Pearson correlation test was used for statistical analysis. $\bar{X}$: Mean, SD: Standard Deviation

The mean scores of the patients' resilience and psychological well-being were determined as (resilience:191.97±26.47; psychological well-being:47.83±7.32) (Table 3). It was determined that there was a correlation (r=.610) between resilience levels and psychological well-being levels, and this correlation was statistically positive, significant, and strong (p<.001) (Table 3).

Table 4. Comparison of resilience and psychological well-being scores based on patients' sociodemographic and disease characteristics

Variable (n=360)	n	%	Psychological Well-Being ($\bar{X}$ ± SD)	PWB Analysis	Resilience ($\bar{X}$ ± SD)	Resilience Analysis
Gender[1]						
Female	195	54.2	47.62 ± 7.12	t: -.598 p = .550	189.64 ± 27.33	t: -1.827
Male	165	45.8	48.08 ± 7.56		194.73 ± 25.21	p = .069
Educational Status[2,3]						
Literate	20	5.6	46.70 ± 6.50	F: 1.700 p=.149	174.40 ± 16.89	F: 11.860
Primary school	169	46.9	46.95 ± 8.22		185.01 ± 25.47	p < .001*
Lower secondary school	44	12.2	48.82 ± 5.26		195.98 ± 24.61	Posthoc: 1<5
Upper secondary school	69	19.2	48.33 ± 7.29		201.58 ± 25.00	
University and above	58	16.1	49.41 ± 5.81		203.86 ± 26.14	
Marital Status[1]						
Married	299	83.1	47.89 ± 7.35	t: .335 p = .738	190.64 ± 26.47	t: -2.126
Single	61	16.9	47.54 ± 7.23		198.51 ± 25.69	p = .034**
Employment Status[1]						
Employed	53	14.7	49.72 ± 5.59	t: 2.044 p=.042**	202.85 ± 26.27	t: 3.283
Unemployed	307	85.3	47.50 ± 7.54		190.09 ± 26.09	p = .001*
Economic Status [2]						
Good	60	16.7	48.65 ± 7.20	F: 3.144 p =.044**	200.70 ± 25.11	F: 6.863
Moderate	266	73.9	48.01 ± 7.25	Diff: 1>3	191.50 ± 26.02	p = .001*
Poor	34	9.4	44.94 ± 7.65		180.24 ± 27.85	Diff: 1>3
Place of Residence[2,3]						
City center	188	52.2	48.06 ± 7.29	F: 1.319	194.75 ± 27.42	F: 6.678
District	125	34.7	48.09 ± 7.31	p = .269	192.57 ± 24.33	p = .001*
Village (Rural area)	47	13.1	46.21 ± 7.40		179.28 ± 24.84	Diff: 1>3
Perception of Support*						
Absent	25	6.9	45.44 ± 7.52	t: -1.695	175.00 ± 22.02	t: -3.371
Present	335	93.1	48.01 ± 7.28	p = .091	193.24 ± 26.36	p = .001*
Type of Cancer[2,3]						
Breast	95	26.4	47.77 ± 7.28	F: .233p = .966	193.28 ± 26.50	F: .521
Genital	66	18.4	47.74 ± 7.43		191.63 ± 28.58	p = .792
Lung	65	18.1	48.63 ± 7.46		192.20 ± 26.10	
Colorectal	64	17.8	47.68 ± 7.11		190.64 ± 25.74	
Gastrointestinal system	35	9.7	47.62 ± 7.95		192.42 ± 24.08	
Respiratory system	21	5.8	46.61 ± 6.37		184.66 ± 23.29	
Skin and other	14	3.8	47.78 ± 8.06		199.50 ± 33.07	
Age [4]	($\bar{X}$ ± SD: 54.78 ± 11.69, min-max: 21-81)			r: .002p = .966	-	r: -.096 p = .070
Time since diagnosis (months) [4]	($\bar{X}$ ± SD: 25.10 ± 38.33)			r: -.167**p= .002**	-	r: -.141** p = .008**

* p < .05, ** p < .01; 1 Independent samples t-test was used.; 2 One-way ANOVA (F) was used.; 3 Post-hoc Bonferroni test was performed.; 4 Pearson correlation test was used.

The gender distribution of the patients was equal; the majority were married, unemployed, and had a moderate economic status, and most had a primary school education, lived in the city center, and had social support resources. Patients diagnosed with breast cancer constituted one-quarter (26.4%) of the study population, while patients diagnosed with genital organ cancer, lung cancer, and colorectal cancer were observed to represent similar proportions. At the time of enrollment in the study, the mean duration since cancer diagnosis was 25.10 ± 38.33 months (Table 4).

The sociodemographic and disease characteristics of the patients were compared with their resilience and psychological well-being. (Table 4). It was determined that patients who were employed had higher mean scores for both psychological well-being and resilience compared to those who were unemployed (psychological well-being: 49.72±5.59; resilience: 202.85±26.27), and that patients who rated their economic status as good had higher scores than those who rated it as poor (psychological well-being: 48.65±7.20; resilience: 200.70±25.11), with the differences being statistically significant ($p<0.05$). It was determined that there was no significant difference between variables such as patients' gender, cancer type, and age, and their levels of psychological well-being and resilience ($p>0.05$). The mean resilience scores of the patients were higher among those who were university graduates or held higher degrees (203.86±26.14), were single (198.51±25.69), lived in the city center (194.75±27.42), and perceived themselves as having a source of support (193.24±26.36), and the differences were statistically significant ($p<0.05$). When the correlation between the duration of diagnosis of the patients and both psychological well-being (r: .-167; p=.002) and resilience (r: .-141; p=.008) was examined, a weak and statistically significant negative correlation was found ($p<0.05$). The Post-hoc Bonferroni test results revealed that resilience levels were higher among university graduates compared to primary school graduates, and among those living in city centers compared to those living in rural areas (Table 4).

Discussion

Cancer and its treatment can lead to certain biopsychosocial changes and challenges in patients' lives. Coping with these changes and challenges may depend on the strategies developed and one's sense of meaning and purpose in life. It can also provide data directly or indirectly regarding resilience and well-being, which are two key indicators of coping. In this context, discussing the experiences of patients with cancer during the course of their illness and treatment would be beneficial for understanding the patients' dynamics. In line with the aim of the study, the experiences of patients with cancer, their levels of resilience and well-being, and the contextual relationship of sociodemographic and disease-related characteristics with resilience and well-being have been discussed holistically, alongside other findings in the literature, under the following thematic headings. In this study, most patients stated that they did not experience difficulties associated with the disease. However, there were also patients who reported experiencing difficulties and undergoing certain changes in their lives. Patients faced difficulties such as issues with accommodation and transportation, a lack of awareness regarding their rights related to their illness and treatment, as well as challenges in exercising those rights, an inability to reach individuals or institutions that could provide support or facilitate communication, and problems accessing necessary medications and scheduling appointments. In addition, they mentioned factors such as leaving the workforce, temporarily staying with someone else due to reasons such as treatment and care, moving to a different home, social isolation, divorce, and certain physical changes. The economic impact of cancer is seen as a primary problem that burdens the patient and their family, as it is worldwide (Alzehr et al. 2022, Cong et al. 2022). Another aspect of change identified in the study was that patients were compelled to depend on others for their care and treatment. In the literature, this situation is considered a consequence of the decrease in patients' self-control and self-management power over their illness and themselves (Hinz et al. 2019). This dependency also included feelings of being a burden to others, inadequacy, and worthlessness (George et al. 2023). Based on these results, we can say that cancer and its treatments can have significant effects on patients regarding their economic situation, daily activities, social relationships, and family relationships.

It is evident that most patients attempt to cope with the difficulties and changes in their lives by engaging in practices that benefit them (such as positive lifestyle changes involving exercise, nutrition, and a focus on social connections). Regular daily activity and nutrition are positive lifestyle variables and important components of coping. Festerling et al. (2023) emphasize that higher resilience is associated with better physical functioning. In this sense, actively involving patients in treatment and developing positive lifestyle changes is not only recommended but often considered desirable (Zhao et al. 2026). Patients' effective coping mechanisms and how they perceive their experiences also positively influence their resilience (Macía et al. 2020). When patients incorporate more positive emotional experiences into this period of their lives, they can build social (such as forming new friendships), physical (better physiological health), and

intellectual resources (such as creativity) (Waugh and Sali 2023). They can prevent the development of psychopathology through positive mental health practices (Schellekens et al. 2024). In addition, they can contribute to enhancing resilience and well-being through education-focused interventions, such as teaching self-management skills, providing disease-related information and emotional support, facilitating the adjustment process (Sihvola et al. 2023), and utilizing professional support systems (Seiler and Jenewein 2019). One of the significant findings of this study is that some patients create meaning and set new goals in their lives after cancer. These results indicate that patients possess a sense of hope and the ability to achieve their established goals for the future. Park et al. (2008) regard meaning-making as a positive indicator of cancer patients' adjustment to the disease process and their empowerment, and they emphasize that focusing patients' efforts on enjoyable activities, experiences, and the potential for future growth can contribute to their well-being.

Most patients state that they have fulfilled their life purposes. There are patients who state that they have achieved family-oriented goals (such as raising children and maintaining a good family life) as well as patients who have set the recovery process related to their illness as their goal. The fact that the patients carried out these goal-oriented actions and had plans may have enabled them to feel good. In a qualitative study conducted by Melin-Johansson et al. (2015), it is observed that individuals diagnosed with cancer set goals for the future, and one of the themes emerging in this context is "fighting the disease." Studies have shown that having existential insight in individuals diagnosed with cancer positively impacts their resilience and well-being (Marco et al. 2023, Gutierrez-Rojas et al. 2025). Based on these results, it can be said that defining life goals and making efforts to realize them may support resilience and well-being in patients. In this context, uncovering the cognitive schemas that shape the experiences of cancer patients, while assessing their resilience and well-being, and recognizing the difficulties and changes in their lives, as well as exploring the meaning they attribute to life, their life goals, and their coping mechanisms, constitutes a significant intervention, even if only in a descriptive sense.

The resilience and well-being levels of the patients included in the study were generally high. This result may stem from the patients' efforts to develop positive coping mechanisms in the face of the disease, as well as their engagement or desire to engage in powerful, meaningful actions to cope with the challenging experiences brought about by cancer and its associated treatment processes. The literature emphasizes that a positive perception of the illness, fulfillment of care needs, and presence of social support mechanisms are important for positive and sustainable well-being (Seiler and Jenewein 2019, Rainson and Rema 2021, Osowiecka et al. 2025, Zwanenburg et al. 2025). In addition, the fact that the majority of the patients were single, possessed a secondary or higher level of education, resided in a central area during the treatment process, and perceived strong social support stands out as other positive variables in the process. It can be considered that the demographic and environmental characteristics in question may serve as protective factors for patients' resilience and well-being.

Matzka et al. (2016) found a negative correlation between resilience and psychological distress levels in patients diagnosed with cancer. Dubey et al. (2015) found that resilience levels were low in patients diagnosed with cancer who reported unmet needs, particularly regarding psychological support, supportive care, and information. These results support the findings of the present study. In this sense, supportive factors and resilience can influence each other in opposite directions. When working with patients diagnosed with cancer, it may be necessary to systematically assess the factors that could influence resilience and well-being from the very first encounter.

Resilience and well-being can be considered two fundamental dynamic structures that reinforce each other and determine a patient's adherence to the treatment process. In this study, a strong, positive, and significant correlation was found between resilience and well-being levels in patients diagnosed with cancer. Seiler and Jenewein (2019) demonstrated that resilience acts as a protective factor against psychological distress and is closely associated with the patient's optimism. In the literature, the correlation between these two variables is generally described as a positive, strong, and reciprocal interaction (Roberts et al. 2018, Rainson and Rema 2021, Festerling et al. 2023, Schellekens et al. 2024). Studies identifying resilience as the most significant predictor and antecedent of psychological well-being demonstrate that patients with high levels of resilience cope more effectively with the traumatic stress

caused by a cancer diagnosis and exhibit higher life satisfaction as a result of this resilience (Hou and Lam 2014). While resilience represents an individual's capacity to bounce back in the face of adversity, this capacity forms the psychological foundation necessary for constructing dimensions of well-being such as autonomy, environmental mastery, and self-acceptance as defined by Ryff (2014). The relationship between resilience and well-being is addressed in the literature within the framework of a "mediating mechanism." Numerous studies demonstrate that external resources such as social support and hope do not directly enhance well-being; rather, they first strengthen the individual's capacity for resilience, and this strengthened structure subsequently elevates well-being (Vartak 2015, Li et al. 2016). In the "dynamic adaptation process" particularly highlighted by Schellekens et al. (2024) while resilience operates as a process, psychological well-being is viewed as the outcome of this process and as a state of sustainable balance. Patients with high levels of well-being become more resilient against future stressors because they feel emotionally more secure. When a person is able to assign meaning to their illness, their resilience increases, and this search for meaning brings about eudaimonic well-being (self-actualization), leading to holistic healing (Park et al. 2008, Carreno and Eisenbeck 2022). Against this backdrop, it can be said that the process of finding meaning in life can be regarded as the fundamental bridge connecting these two variables.

When the sociodemographic characteristics of the patients are evaluated, it can be considered that these characteristics may serve as protective factors regarding resilience and well-being. In this context, it may be important to evaluate the correlation between each variable and resilience and well-being. Gender, resilience, and well-being: Our study found no significant difference in terms of gender regarding resilience and well-being. The results of this study are similar to the findings of certain studies in the literature regarding resilience (Hu et al. 2018, Macía et al. 2020, Festerling et al. 2023). A meta-analysis conducted by Seiler and Jenewein (2019) also emphasized that no definitive conclusion could be reached regarding the protective role of gender in resilience. A review of the literature on well-being reveals that Weitzner et al. (2025), in their study involving bladder cancer survivors, emphasized that women bear a disproportionate psychosocial burden compared to men regarding depression, social isolation, and coping skills, and that these factors negatively affect psychosocial well-being. However, Fergus and colleagues (2024) emphasized that the difference in general well-being between the two genders is small, and that this result may stem from similar socioeconomic conditions. They pointed out that the factors influencing well-being may vary by gender, noting that women are more susceptible to social isolation and relational stressors placing them in a high-risk group for clinical depression, whereas men's well-being is primarily affected by losses related to autonomy, financial power, and physical health. While these results suggest that resilience and well-being do not differ by gender, this may also be viewed as a limitation arising from the fact that the studies were not gender-focused; thus, it would be meaningful to evaluate the findings through gender-sensitive research.

This study shows that patients' levels of resilience and well-being increase as their level of education rises. However, while a significant difference was found between educational status and resilience, no significant difference was found regarding well-being. It appears that there are a limited number of studies on cancer regarding educational status and resilience. In the study by Shabanloei et al. (2025), it was highlighted that as education level increases, the ability to access accurate information about the disease and manage "illness perception" improves, potentially leading to increased resilience; similarly, studies by Hu et al. (2018) and Akyüz (2016) emphasized a significant positive correlation between educational attainment and resilience. However, no significant correlation was found between educational status and resilience in the study by Wu et al. (2016). According to Ryff's (2014) six-dimensional model of well-being, educated individuals have higher scores for "environmental mastery" and "personal growth." The study by Osowiecka et al. (2025) indicates that education can reduce uncertainty and enhance well-being by enabling better processing of information regarding the disease. In this context, when the study's findings are considered collectively, assessing patients' education and knowledge levels may be viewed as a meaningful intervention, given that educational status can be a significant determinant of resilience and well-being for patients.

The economic burden of cancer is a major stressor that reduces resilience in low-income families (Alzehr et al. 2022). It also has a negative impact on "life satisfaction" and "subjective well-being" (Singer et al. 2018). Economic security helps maintain well-being (Singer et al. 2018) and psychological resilience by facilitating access to supportive services and enabling the individual to focus on treatment (Alzehr et al. 2022). The study by Festerling et al. (2023) also yielded results supporting the correlation between a good income level and resilience. Our research revealed a significant difference between economic and employment status and resilience and well-being. This result clearly demonstrates that economic security and employment status serve not merely as material comfort for individuals navigating the cancer journey, but also as a protective factor that fosters psychological resilience and well-being.

Single patients in our study possessed higher resilience than married patients. Some studies emphasize that married individuals tend to exhibit higher levels of resilience due to the social support provided by marriage (Li et al. 2016, Carreno and Eisenbeck 2022, Cui and Wang 2024) and that their well-being levels are found to be significantly higher than those of single patients exposed to social isolation (Zhu et al. 2024). They suggest that the ability to effectively utilize broad friendship networks or professional care networks (such as nursing support) instead of relying on spousal support (Melin-Johansson et al. 2015) combined with a tendency to view the situation as an opportunity for personal growth and an existential challenge rather than a fear of becoming a burden to others (Zhu et al. 2024) may have enhanced resilience. In our study, the resilience levels of patients who reported the presence of social support sources were significantly high. Some studies conducted with patients diagnosed with cancer have shown a positive and significant correlation between resilience level and perceived support (Li et al. 2016, Hu et al. 2018, Lyu et al. 2024, Cui and Wang 2024) and have determined that both hope and social support have the potential to enhance resilience (Li et al. 2016, Somasundaram and Devamani 2016, Er and Erkan 2023). Hu et al. (2018) demonstrated that as the perception of social support increases in lung cancer patients, anxiety and depression decrease, which in turn directly enhances well-being. It is emphasized that family support enhances emotional well-being by reducing feelings of loneliness (Cui and Wang 2024) and fostering a sense of hope in the patient (Vartak 2015, Li et al. 2016). Because resilience may depend not only on the presence of external support systems but also on the “individual resilience” mechanisms an individual develops in the absence of such support. In light of these results, the emphasis placed by Wang et al. (2024) that social isolation lowers “social well-being” scores among single individuals, even when resilience levels are high is a noteworthy point. In this regard, being single may foster a positive context for resilience and well-being by enabling patients to more effectively utilize their personal resources, their surrounding environment, and their coping skills throughout the course of their illness.

In this study, the resilience and well-being scores of city dwellers were high. However, no significant difference was found between the place of residence and psychological well-being. Osowiecka et al. (2025) emphasize that the distance between a patient's place of residence and the treatment site hinders psychological adjustment by creating additional stressors such as transportation costs, loss of time, and physical fatigue and undermines psychological well-being by increasing unmet practical and informational needs. Increased distance can negatively affect access to supportive care services and the perception of support. Given that half of the patients in this study lived in the city or even in easily accessible districts it is conceivable that this may have provided an advantage. Nevertheless, given the difficulties patients and their families face due to the distance to treatment centers, the establishment of temporary accommodation systems through institutional efforts, regional administrative frameworks, and sectoral collaborations can be considered a meaningful initiative to enhance institutional accessibility.

Age, resilience, and well-being: In this study, a significant negative correlation was found between age and resilience, whereas the correlation between age and well-being was negative but not significant. The literature indicates a negative correlation between resilience and age; it suggests that being young can sometimes be a factor supporting cognitive adaptability (Wang et al. 2024). It has been stated that high resilience enhances adjustment to cancer in older individuals (Matzka et al. 2016) and reduces psychological distress compared to younger patients (Matzka et al. 2016, George et al. 2023). It is stated that older individuals cope with cancer more resiliently because of their life experiences, but they experience a conflict of dependence due to physical limitations (George et al. 2023). Developing cancer at

a young age can seriously threaten psychological well-being due to the disruption of one's career, family formation, and social roles. Psychological distress following diagnosis may be more acute in young people; however, their cognitive flexibility can enable the reconstruction of well-being in the long term (Hou and Lam 2014). The literature generally emphasizes that age alters the quality rather than the quantity of well-being. For young people, success, the future, and concerns regarding life goals (Stanton et al. 2015); for middle-aged individuals, environmental mastery, caregiving responsibilities for children and elderly family members, and economic obligations (Telef 2013); and for the elderly, peace and a sense of meaning (Carreno and Eisenbeck 2022) can be determinants of well-being. Considering the high mean age of the patients in our study, as well as cultural perspectives on old age specifically regarding the meaning attributed to functionality in later life and the ways in which life purposes are realized it is thought that their resilience and well-being may have been positively influenced.

When the disease characteristics of the patients were considered, patients diagnosed with breast cancer, genital organ cancer, and lung cancer in that order comprised the top three groups. Globally and in our country, the distribution of cancer types is ranked as follows: breast cancer, lung cancer, and colorectal cancer (IARC 2024). The results of our study are similar to these statistics. In this context, it can be said that the distribution of patients by cancer type in terms of incidence remains valid and continues to be a widespread issue. One of the key features of this study is that it encompasses not only patients with specific types of cancer and timeframes since diagnosis, but also a broad range of patient groups with diverse cancer types and varying times since diagnosis. In this respect, it can be said that the results are comprehensive and represent one of the study's original aspects.

Our study did not reveal significant differences between cancer types and resilience. Research on various types of cancer shows that resilience levels vary. In studies conducted by Luo et al. (2024) with patients diagnosed with laryngeal cancer and by Er and Erkan (2023) with patients diagnosed with breast cancer, resilience levels were found to be high; however, in the study conducted by Wu et al. (2016) with breast cancer patients, resilience levels were found to be low. In the study by Festerling et al. (2023), findings revealed both significant and non-significant differences between cancer types and resilience. A comprehensive study conducted by Osowiecka et al. (2025) with 1,062 patients in Poland demonstrated that the type of cancer is a determining factor regarding patients' unmet supportive care needs (psychological, financial, informational, etc.).

No significant correlation was found between the time to cancer diagnosis and resilience in the study. However, the patients' capacity for adaptation is affected during the various stages and phases of cancer. The cancer experience is not a single event that disrupts an individual's psychological balance but a constantly changing process that extends from the moment of diagnosis to the progression of the disease. In this process, resilience is conceptualized as emphasized by Schellekens et al. (2024) as a “dynamic adaptation process” exhibited in the face of changing conditions. It indicates that it is an active adaptation mechanism that reshapes itself according to the stage of the disease. The diagnostic phase is the period when the individual experiences the most intense uncertainty and psychological distress (Zingler et al. 2025). In this early stage, resilience is measured by the individual's ability to maintain cognitive clarity in the face of sudden trauma and to manage their perception of the illness. According to the model proposed by Schellekens et al. (2024), resilience at the time of diagnosis relates to how an individual appraises current stressors and how quickly they can recover from the shock. At this stage of the disease, reducing uncertainty and placing the disease within an understandable framework constitutes the first step in dynamic adaptation (Wolyniec et al. 2022). As the disease progresses to advanced stages, the process of resilience gives way to a more complex structure. At this stage, resilience is defined as the maintenance of psychological well-being despite diminished physical capacity, rather than the expectation of physical recovery. As in the revised coping model proposed by Roberts et al. (2018), patients in the advanced stage are in a constant state of “reappraisal.” Schellekens et al. (2024) describe this process in the advanced stage as the patient's effort to find a new "equilibrium point" aligned with changing realities (metastasis, physical dependence, etc.). Carreno and Eisenbeck (2022) emphasize that resilience is directly related to the ability to find meaning and achieve existential adaptation in the final stages of life. In the study by Festerling et al. (2023), a negative correlation was found between the time elapsed since diagnosis and

resilience. In their study involving newly diagnosed breast cancer patients, Wu et al. (2016) found that resilience increased as the time since diagnosis (0–2 months, 2–4 months, and 4 months or more) increased, although no significant correlation was observed. Furthermore, a significant correlation was found in this study between the time elapsed since diagnosis and well-being. In a review by Seiler and Jenewein (2019) one of the limited number of studies examining the correlation between the diagnosis period and well-being, it was reported that patients with lung, gynecological, and hematological cancers experienced the highest levels of distress during the diagnosis process. The study by Zwanenburg et al. (2025) demonstrates that the disease status, the prolonged nature of the response to treatment, and ongoing uncertainties rather than the type of cancer impact psychological well-being. The reason for these differences in results may be the variation in the time taken to receive a diagnosis across the studies.

The results of this descriptive, relational, and cross-sectional study are limited to the 360 patients who presented to the Akdeniz University Medical Oncology Outpatient Clinic, Inpatient Clinic, and Chemotherapy Unit, and cannot be generalized. Resilience and well-being, the main variables of our study, are not dynamics that change rapidly due to sociocultural trends or temporal factors. On the contrary, these variables are universal, structural, and timeless existential coping mechanisms exhibited by human psychology in the face of a life-altering crisis such as cancer. Efforts have been made to access studies conducted since the period when the research data were collected and reported. A review of the available literature yielded no studies that sampled patients with various types of cancer together, addressed their experiences and views within this context, and simultaneously evaluated resilience and well-being. Nevertheless, when interpreting our results within the discussion, it is possible to state supported by certain studies (whether similar or different) that the data maintain their validity and possess a distinctive character. In this context, it is understood that the work continues to reflect both theoretically and clinically the existential crises of contemporary cancer patients, the psychosocial burdens accompanying the diagnosis, and the strong correlation between resilience and well-being; it is therefore considered to hold enduring significance in the literature. Although this study presents certain quantitative results regarding patients' experiences and views concerning cancer, the fact that these experiences have not been examined in qualitative depth can be considered a limitation. Another limitation is the collection of data through self-report scales. In scales of such nature, there is always a risk of social desirability reflecting patients' tendency to present themselves as psychologically stronger or better adjusted which may be a potential factor contributing to high scores in resilience and well-being. However, efforts have been made to minimize the potential impact of this risk by keeping patients' identifying information completely confidential, emphasizing the principle of voluntary participation, and ensuring that they complete the forms in a comfortable environment.

Conclusion

An examination of patients' experiences and the impact of certain sociodemographic and disease-related characteristics on resilience and well-being reveals that cancer patients exhibit high levels of resilience if they have a high level of education, live in a central location, are single, possess social support, perceive their economic status favorably, and are employed. However, when examining the results regarding sociodemographic characteristics in terms of well-being, no significant differences were found in factors such as gender, education level, marital status, characteristics of the place of residence, and perceived support with the exception of economic status and employment status. A positive correlation was found between age and resilience, whereas a negative and non-significant correlation was found between age and well-being. At the same time, no significant difference was found between the type of cancer and resilience or well-being. A significant negative correlation was found between the time to diagnosis and both resilience and well-being. Consequently, in the context of these results, it can be said that the cancer patients included in the study possess certain protective factors and experiences that enable them to cope resiliently with the effects of cancer and its treatments thereby fostering resilience and well-being. Furthermore, considering the results and limitations of this study, examining the links between resilience, well-being, and fundamental variables, such as the individual, event, place, and time through both longitudinal and cross-sectional research (addressing both situational and continuous aspects) could contribute to mitigating limitations, identifying dynamics, and yielding more contextual findings.

Comparative, intervention-based, and long-term follow-up studies involving newly diagnosed individuals or groups at different stages of the disease while accounting for age and gender could yield results offering a broader perspective on resilience and well-being. In addition to these quantitative methods, phenomenological studies could serve as a means to bridge the gap in understanding at a deeper level the experiences and patient perspectives associated with receiving a cancer diagnosis. In addition, it is understood that a multi-component approach is necessary to ensure resilience and well-being. In this context, it is considered that patient assessment focused on health-promotion and wellness diagnoses could be beneficial for nursing education and practice. Establishing institutional-level support mechanisms regarding the economic, social, and legal rights of individuals and their families can contribute to supporting patients' mental health, well-being, and resilience. Future methodological studies in this area could contribute to nursing theory and practice regarding cancer-related cases, specifically in the context of resilience and well-being.

References

Akyüz S (2016) Kolorektal kanserlere bağlı stoma açılan ve açılmayan hastalarda dayanıklılık düzeylerinin karşılaştırılması. (Yüksek lisans tezi). Ankara, Ankara Üniversitesi.

Alzehr A, Hulme C, Spencer A, Morgan-Trimmer S (2022) The economic impact of cancer diagnosis to individuals and their families: a systematic review. Support Care Cancer, 30:6385-6404.

Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I et al. (2024) Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin, 74:229-263.

Carreno DF, Eisenbeck N (2022) Existential insights in cancer: meaning in life adaptability. Medicina (Kaunas), 58:461.

Caruso R, Breitbart W (2020) Mental health care in oncology. Contemporary perspective on the psychosocial burden of cancer and evidence-based interventions. Epidemiol Psychiatr Sci, 9;29:e86.

Cong Z, Tran O, Nelson J, Silver M, Chung K (2022) Productivity Loss and Indirect Costs for Patients Newly Diagnosed with Early- versus Late-Stage Cancer in the USA: a large-scale observational research study. Appl Health Econ Health Policy, 20:845-856.

Connor KM, Davidson JR (2003) Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). Depress Anxiety, 18:76-82.

Cui C, Wang L (2024) Role of social support in the relationship between resilience and sleep quality among cancer patients. Front Psychiatry, 15:1310118.

Deshields TL, Heiland MF, Kracen AC, Dua P (2016) Resilience in adults with cancer: development of a conceptual model. Psychooncology, 25:11-18.

Diener E, Scollon CN, Lucas RE (2009) The evolving concept of subjective well-being: The multifaceted nature of happiness. In Assessing Well-Being: The Collected Works of Ed Diener (Ed E Diener):67-100. Dordrecht, Springer.

Dubey C, De Maria J, Hoeppli C, Betticher DC, Eicher M (2015) Resilience and unmet supportive care needs in patients with cancer during early treatment: A descriptive study. Eur J Oncol Nurs,19:582-8.

Er ÖS, Erkan HN (2023) The mediating role of psychological resilience in the relationship between spiritual well-being and supportive care needs in women with breast cancer. Eur J Breast Health, 19:297-303.

Fereidouni Z, Dehghan Abnavi S, Ghanbari Z, Gashmard R, Zarepour F, Khalili Samani N et al. (2024) The impact of cancer on mental health and the importance of supportive services. Galen Med J, 13:e3327

Fergus DN, Chen YH, Chuang YC, Ma AS, Chuang KY (2024) A cross-sectional analysis of gender and psychological well-being among older Taiwanese adults. Front Psychol, 15:1392007.

Festerling L, Buentzel J, Fischer von Weikersthal L, Junghans C, Zomorodbakhsch B, Stoll C et al. (2023) Resilience in cancer patients and how it correlates with demographics, psychological factors, and lifestyle. J Cancer Res Clin Oncol, 149:5279-5287

Forbes H, Carreira H, Funston G, Andresen K, Bhatia U, Strongman H et al. (2024) Early, medium and long-term mental health in cancer survivors compared with cancer-free comparators: matched cohort study using linked UK electronic health records. EClinical Medicine, 76:102826.

George T, Shah F, Tiwari A, Gutierrez E, Ji J, Kuchel GA et al. (2023) Resilience in older adults with cancer: A scoping literature review. J Geriatr Oncol, 14:101349.

Gizir CA (2007) Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler üzerine bir derleme çalışması. Türk Psikolojik Danışma ve Rehberlik Dergisi, 3:113-128.

Gutierrez-Rojas A, Manco-Herrera C, Nuñez-Escarcena X, Loayza-Ramirez L, Sanca-Valeriano S, Rodriguez-Pantigoso W et al. (2025) The influence of spirituality on psychological resilience in cancer patients undergoing oncological treatment: a cross-sectional study. BMC Palliat Care, 24:136.

Gürgan U (2006) Yılmazlık Ölçeği: Ölçek geliştirme, güvenirlik ve geçerlik çalışması. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi, 39:45-74.

Hinz A, Friedrich M, Kuhnt S, Zenger M, Schulte T (2019) The influence of self-efficacy and resilient coping on cancer patients' quality of life. Eur J Cancer Care, 28:e12952.

Hou WK, Lam JHM (2014) Resilience in the year after cancer diagnosis: a cross-lagged panel analysis of the reciprocity between psychological distress and well-being. J Behav Med, 37:391-401.

Hu T, Xiao J, Peng J, Kuang X, He B (2018) Relationship between resilience, social support as well as anxiety/depression of lung cancer patients: a cross-sectional observation study. J Cancer Res Ther, 14:72-77.

International Agency for Research on Cancer (IARC) (2024) Global Cancer Observatory: Cancer Today (worldwide data, GLOBOCAN 2024). Lyon, World Health Organization.

Jolley J (2014) Introducing Research and Evidence-Based Practice for Nursing and Healthcare Professionals. (Çeviri Ed. S Ayaz). Ankara, Nobel Akademik.

Kibralew G, Wassie YA, Kelebie M, Rtbey G, Tadesse G, Melkam M et al. (2025) Psychological distress among cancer patients in African countries: a systematic review and meta-analysis study. BMC Psychol, 13:128.

Kim HY (2012) Statistical notes for clinical researchers: assessing normal distribution. Restor Dent Endod, 37:245-248.

Li MY, Yang YL, Liu L, Wang L (2016) Effects of social support, hope and resilience on quality of life among Chinese bladder cancer patients: a cross-sectional study. Health Qual Life Outcomes, 14:73.

Luo D, Eicher M, White K (2020) Individual resilience in adult cancer care: A concept analysis. Int J Nurs Stud, 102:103467.

Luo M, Lin S, Li Z, Wu L, Chen L, Yang Q et al. (2024) The mediating role of loneliness between psychological resilience and health-related quality of life among patients with nasopharyngeal carcinoma: a cross-sectional study using structural equation modeling. BMC Psychiatry, 24:668.

Luthar SS, Cicchetti D, Becker B (2000) The construct of resilience: a critical evaluation and guidelines for future work. Child Dev, 71: 543-562.

Lyu XC, Jiang HJ, Lee LH, Yang CI, Sun XY (2024) Oncology nurses' experiences of providing emotional support for cancer patients: a qualitative study. BMC Nurs, 23:58.

Macía P, Barranco M, Gorbeña S, Iraurgi I (2020) Expression of resilience, coping and quality of life in people with cancer. PloS One, 15:e0236572.

Marco JH, Castejón J, Isern C, Grau L, Pérez Rodríguez S (2023). Longitudinal evolution of meaning in life and its relationship with coping strategies in Spanish patients with a breast cancer diagnosis. Support Care Cancer, 31:424.

Masten AS, Lucke CM, Nelson KM, Stallworthy IC (2021) Resilience in development and psychopathology: multisystem perspectives. Annu Rev Clin Psychol, 17: 521-549.

Matzka M, Mayer H, Köck-Hódi S, Moses-Passini C, Dubey C, Jahn P et al. (2016) Relationship between resilience, psychological distress and physical activity in cancer patients: A cross-sectional observation study. PloS One. 11: e0154496

Melin-Johansson C, Öhlén J, Koinberg I, Berg L, Nolbris MJ (2015) The recovery process when participating in cancer support and rehabilitation programs in Sweden. Glob Qual Nurs Res, 2:2333393615595965.

National Cancer Institute (2025) Side effects of cancer treatment. https://www.cancer.gov/about-cancer/treatment/side-effects (Accessed 10.10.2025)

Osowiecka K, Szwiec M, Nowakowski JJ, Kurowicki M, Dolińska A, Gwara A et al. (2025) Sociodemographic and clinical factors related to high rates of unmet supportive care needs among Polish cancer patients. Front Psychol, 16:1472026.

Park CL, Edmondson D, Fenster JR, Blank TO (2008) Meaning making and psychological adjustment following cancer: the mediating roles of growth, life meaning, and restored just-world beliefs. J Consult Clin Psychol, 76:863-875.

Park CL, Pustejovsky JE, Trevino K, Sherman AC, Esposito C, Berendsen M et al. (2019) Effects of psychosocial interventions on meaning and purpose in adults with cancer: A systematic review and meta-analysis. Cancer, 125:2383-2393.

Quinto RM, De Vincenzo F, Campitiello L, Innamorati M, Secinti E, Iani L (2022) Meaning in life and the acceptance of cancer: a systematic review. Int J Environ Res Public Health, 19:5547.

Rainson D, Rema MK (2021) Resilience and psychological wellbeing among cancer patients. International Journal of Science Academic Research, 2:1401-1408.

Roberts D, Calman L, Large P, Appleton L, Grande G, Lloyd-Williams M et al. (2018) A revised model for coping with advanced cancer: mapping concepts from a longitudinal qualitative study of patients and carers coping with advanced cancer onto Folkman and Greer's theoretical model of appraisal and coping. Psychooncology, 27:229-235.

Ryff CD (2014) Psychological well-being revisited: advances in the science and practice of eudaimonia. Psychother Psychosom, 83:10-28.

Schellekens MPJ, Zwanenburg LC, van der Lee ML (2024) Resilience in the face of cancer: on the importance of defining and studying resilience as a dynamic process of adaptation. Curr Oncol, 31:4003-4014.

Seiler A, Jenewein J (2019) Resilience in cancer patients. Front Psychiatry, 10:208.

Shabanloei R, Ghasempour M, Zamanesazi R, Purabdollah M, Asghari-Jafarabadi M (2025) Illness perception and resilience in patients with cancer: a cross-sectional study. BMC Psychol, 13:276.

Sihvola SP, Kiwanuka F, Kvist TA (2023) Promoting resilience among adult cancer patients: an integrative review of patient education methods. Eur J Oncol Nurs, 64:102342.

Singer S, Roick J, Meixensberger J, Schiefke F, Briest S, Dietz A et al. (2018) The effects of multi-disciplinary psycho-social care on socio-economic problems in cancer patients: a cluster-randomized trial. Support Care Cancer, 26:1851-1859.

Somasundaram RO, Devamani KA (2016) A comparative study on resilience, perceived social support and hopelessness among cancer patients treated with curative and palliative care. Indian J Palliat Care, 22:135-40.

Stanton AL, Rowland JH, Ganz PA (2015) Life after diagnosis and treatment of cancer in adulthood: contributions from psychosocial oncology research. Am Psychol, 70:159-174.

Sung H, Filho AM, Laversanne M, Ferlay J, Siegel RL, Soerjomataram I et al. (2026) Global cancer statistics 2024: GLOBOCAN estimates of incidence and mortality worldwide for 34 cancers in 186 countries. CA Cancer J Clin, 76: e70090.

Sümbüloğlu K, Sümbüloğlu V (2012) Biyoistatistik. Ankara, Hatiboğlu Yayınevi.

Telef BB (2013) Psikolojik iyi oluş ölçeği: Türkçeye uyarlama, geçerlik ve güvenirlik çalışması. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 28: 374-384.

Ulibarri-Ochoa A, Macía P, Ruiz-de-Alegría B, García-Vivar C, Iraurgi I (2024) The role of resilience and coping strategies as predictors of well-being in breast cancer patients. Eur J Oncol Nurs, 71:102620.

Valentine TR, Park KR, Presley CJ, Shields PG, Andersen BL (2024) Lung cancer patients' illness perceptions: Prognostic for psychological and physical health trajectories. Health Psychol, 43:913-923.

Vartak J (2015)The Role of hope and social support on resilience in cancer patients. Indian J Ment Health, 2:35-42

Wang C, Qiu X, Yang X, Mao J, Li Q (2024) Factors influencing social isolation among cancer patients: A Systematic Review. Healthcare (Basel), 12:1042.

Waugh CE, Sali A W (2023) Resilience as the ability to maintain well-being: An allostatic active inference model. J Intell, 11:158.

Weitzner AS, Grutman AJ, Arbuiso A, Cheaib J, Rivera Lopez C, Singla N (2025) Gender-based differences in psychosocial well-being among bladder cancer survivors. Eur Urol Oncol, 8:592-598.

Wolyniec K, Sharp J, Fisher K, Tothill RW, Bowtell D, Mileshkin L et al. (2022) Psychological distress, understanding of cancer and illness uncertainty in patients with cancer of unknown primary. Psycho-oncology, 31:1869-1876.

WHO (2024) Global cancer burden growing, amidst mounting need for services. https://www.who.int/news/item/01-02-2024-global-cancer-burden-growing--amidst-mounting-need-for-services (Accessed 31.10.2025)

WMA (2025) World Medical Asociation(WMA) Declaration of Helsinki – ethical principles for medical research involving human participants. https://www.wma.net/policies-post/wma-declaration-of-helsinki/ (Accessed 11.10.2025)

Wu Z, Liu Y, Li X, Li X (2016) Resilience and associated factors among mainland chinese women newly diagnosed with breast cancer. PloS One, 11: e0167976.

Zhao D, Shen X, Zhang M, Li X, Wang C, Nie L (2026) Associations between psychosocial distress and health-promoting lifestyles in patients with malignant tumors: the critical role of self-perceived burden. Front Psychol, 17: 1797971.

Zhu H, Yang L, Yin H, Yuan X, Gu J, Yang Y (2024) The influencing factors of psychosocial adaptation of cancer patients: A systematic review and meta-analysis. Health Serv Insights, 17:11786329241278814.

Zingler H, Steinmann D, Ernst J, Goerling U, Hermann M, Hornemann B et al. (2025) Psychosocial distress, perceived need and utilization of psychosocial support services in patients in the early phase after the first cancer diagnosis. J Cancer Res Clin Oncol, 151:65.

Zwanenburg LC, van Roekel E, Suijkerbuijk KPM, Koldenhof JJ, Schuurbiers-Siebers OCJ, van der Stap J et al. (2025) Resilience in advanced cancer patients who obtain a long-term response to immunotherapy or targeted therapy: an Ecological Momentary Assessment study. Ann Behav Med, 59:kaaf042.

Authors Contributions: The author(s) have declared that they have made a significant scientific contribution to the study and have assisted in the preparation or revision of the manuscript

Peer-review: Externally peer-reviewed.

Ethical Approval: Ethical approval for this study was obtained from the Akdeniz University Clinical Research Ethics Committee pursuant to date 11.11.2015 and number 321. Participants provided informed consent prior to participating in the study.

Conflict of Interest: No conflict of interest was declared.

Financial Disclosure: No financial support was declared for this study.

Acknowledgment: This research was derived from the master's thesis titled "Determination of resilience and well-being in individuals diagnosed with cancer," registered in the YÖK National Thesis Center under the thesis number 520583.

This study was presented as an oral presentation at the National and International Psychiatric Nursing Congress (November 21-23, 2018, Antalya, Turkey) and published in the congress abstract book (UPHK 2018 Congress Book, pp. 1044-1045)

Authors would like to thank the study participants, Dr. Deniz ÖZEL ERKAN and Prof. Dr. Can Deniz KÖKSAL for their support in statistical analyses, and all staff members working in the Department of Medical Oncology at Akdeniz University Hospital for their support throughout the research process.