



The Mediating Role of Psychological Resilience in the Relationship Between Spiritual Well-Being and Supportive Care Needs in Women With Breast Cancer

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ABSTRACT

Objective: The aim of this study was to examine the mediating role of psychological resilience as part of the effect of spiritual well-being in the supportive care needs of women with breast cancer.

Materials and Methods: Cross-sectional design. The Connor-Davidson Resilience Scale Short Form, the Spiritual Well-Being Scale, and the Supportive Care Needs Survey Short Form were completed women with breast cancer treated at the oncology clinic of a university hospital. For the mediation model, Bootstrap methods with PROCESS Macro were used.

Results: The study was conducted with 126 breast cancer patients. A significant negative, moderate relationship was found between supportive care needs and psychological resilience ($r = -0.560$). There was a significant negative, but weak relationship between supportive care needs and spiritual well-being ($r = -0.385$). The indirect effect of spiritual well-being on supportive care needs was significant, thus, psychological resilience was shown to have a mediating effect on the relationship between spiritual well-being and supportive care needs [$b = -0.370$, 95% confidence interval (- 0.5568, -0.1911)].

Conclusion: Psychological resilience appears to contribute to a reduction in supportive care needs of breast cancer patients by affecting spiritual well-being.

Keywords: Breast cancer; psycho-oncology; resilience; spiritual well-being; supportive care

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Key Points

- Psychological resilience contributes to the reduction of supportive care needs of breast cancer patients by affecting spiritual well-being.

Introduction

Breast cancer is the most commonly diagnosed cancer among women globally, with an estimated 2.3 million new cases annually, making it the most prevalent type of cancer in women (1). Breast cancer is the most common type of cancer in women in Turkey with an incidence of 47.7/100.000 people (2). Despite the frequent diagnosis of breast cancer, mortality rates have either remained stable or decreased since the 1990s, due to advanced early detection and treatment methods (3). However, breast cancer patients experience varying degrees of psychological distress during both the pre-treatment and post-treatment processes (4). Spirituality, in this context, is an important source of strength and coping for cancer patients to adapt to their illness (5). Thus, the well-being of individuals in the physical, social, psychological, and spiritual domains can be improved through spiritual well-being. Spiritual well-being is defined as individuals' ability to establish relationships with others, discover the meaning of life and purpose of life, and believe in and relate to a higher power (6). There

is a positive relationship between spiritual well-being and mental health during cancer (7). It has been determined that spiritual well-being has a positive effect on hope in women with cancer. This effect is explained through the mediating role of psychological resilience and perceived social support (8). It is known that spiritual well-being also enhances the quality of life (5, 9). High levels of spiritual well-being are associated with fewer physical symptoms and reduced levels of depression in patients (9). Furthermore, it has been reported that spirituality increases psychological resilience in breast cancer patients (10).

Resilience is the ability of an individual to maintain or improve psychological and physical well-being during or after exposure to stressful situations in life (11). For cancer patients, resilience refers to a dynamic process in which successful adaptation to cancer-related problems is developed (12). It has been shown that resilience may independently contribute to lower levels of depression in breast cancer patients (13). Breast cancer survivors tend to have higher levels

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of psychological resilience compared to healthy women (14). There is a strong negative correlation between the severity of symptoms experienced by breast cancer patients and resilience. In other words, as the severity of symptoms increases, resilience tends to decrease (13).

Advances in cancer treatment make supportive care an important part of excellence in oncological care due to an increase in recovery rates and quality of life (15). Supportive care encompasses interventions aimed at improving overall well-being, including physiological, psychological, social, and spiritual aspects, to enhance quality of life. It requires screening for specific symptoms and tools to allow patients to effectively report their outcomes. Supportive care should be evidence-based, highlighting the need for further research in this field (16). Psychological resilience is a personal characteristic that involves emotional strength, courage, and the ability to adapt, mitigating the negative impact of illness and supporting the process of adaptation. It includes characteristics such as perseverance, having a sense of purpose in life, and self-belief (14). Spiritual well-being, on the other hand, is a subjective experience of having a purpose in life, involving both emotional health and concerns about the meaning of life (17). The pursuit of spiritual well-being through the development of psychological resilience, which plays a key role in the process of coping with the disease, may reduce supportive care needs in patients. Determining the meaning of life is therefore believed to be a way that psychological resilience, a personal characteristic, might contribute to the relationship between spiritual well-being and the need for supporting care. There is no published research showing how psychological resilience affects this relationship. Therefore, the aim of this study was to clarify the connection between psychological resilience, spiritual well-being, and supportive care needs in female breast cancer patients.

The Hypothesis of the Research:

H₁: There is a difference between spiritual well-being, psychological resilience, and supportive care needs according to the sociodemographic and clinical characteristics of the patients.

H₂: Spiritual well-being will be positively associated with psychological resilience.

H₃: Psychological resilience being will be negatively associated with supportive care needs.

H₄: Spiritual well-being being will be negatively associated with supportive care needs.

H₅: Psychological resilience mediates the relationship between spiritual well-being and supportive care needs.

Materials and Methods

Study Design

This study was of cross-sectional design and was planned to determine the effects of psychological resilience and spiritual well-being on supportive care needs in breast cancer patients.

Setting and Participants

This study was carried out between July 27 and September 29, 2022, in the Adult Oncology Outpatient Clinic of a university hospital. The population of the study consisted of breast cancer patients who received care between the specified dates. The sample size calculation for the study was based on published evidence (18). In the sample

analysis, the calculation was made based on the rate of need for supportive care in cancer patients (54%) by calculating the population from the unknown formula. Since the population was not known in sample size calculation in studies conducted on a single sample, 126 people were calculated from the calculation formula (19). Therefore, 126 patients over 18 years of age, willing to participate in the study, diagnosed with breast cancer at least one month earlier, and without any psychiatric diagnosis, were included in the study.

Data Collection

Patients were first evaluated according to the inclusion criteria. Firstly, patient medical records were checked for previous diagnosis of psychiatric illness. Then, the patient was informed about the study, and written consent was obtained. The following tools were used to assess the patients (see below). The Sociodemographic and Clinical Characteristics Form was used to determine individual characteristics, The Connor-Davidson Psychological Resilience Short Form to evaluate psychological resilience, The Spiritual Well-Being Scale to evaluate spiritual well-being, and The Supportive Care Needs Scale Short Form to determine supportive care needs. Data were collected through face-to-face interviews before patients received chemotherapy.

Measurements

The Sociodemographic and Clinical Characteristics Form, Connor-Davidson Resilience Scale Short Form, Spiritual Well-Being Scale, and Supportive Care Needs Scale Short Form were used to collect data.

The Sociodemographic and Clinical Characteristics Form: This form was developed by researchers in line with the literature (13, 14). This form includes variables such as age, gender, marital status, number and status of having children, education level, time elapsed since diagnosis, diagnosis stage, and treatment.

The Connor-Davidson Resilience Scale Short Form (CD-RISC-10) was developed to determine the psychological resilience of individuals. It is a 5-point Likert-type scale with 25 items. Afterwards, as a result of the factor analysis for the scale items, short forms of the scale emerged, and reliability and validity studies of the 10-item short form were conducted. Kaya and Odacı (20) determined that the Turkish version of the scale was a valid and reliable measurement tool for determining psychological resilience. Responses on the scale are “Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree”. The scale has a single-factor structure and the higher the score, the higher the psychological resilience (20). The Cronbach’s alpha value of the scale was found to be 0.910.

The Spiritual Well-Being Scale (SWBS) was developed by Ekşi and Kardaş (21) to make sense of life in line with the values of individuals. It is a 5-point Likert-type, 29-item scale. Responses on the scale are “1 = Not applicable to me at all; 2 = Not applicable to me; 3 = Somewhat applicable to me; 4 = Quite applicable to me; 5 = Completely applicable to me”. A minimum of 29 and a maximum of 145 points are obtained from the scale. The scale consists of three sub-dimensions: “Transcendence”, “Harmony with Nature”, and “Anomie (it is a situation that causes the loss of understanding that provides clues about the purpose and meaning of life on earth)”. The higher the scores, the higher the spiritual well-being. Getting a high score on the scale sub-score items indicates that it has that sub-dimension feature. The Cronbach alpha value of the scale was 0.886 (21). In this study, the Cronbach alpha value of the scale was found to be 0.680.

The Supportive Care Needs Scale Short Form (SCNS-SF), The Supportive Care Needs Scale Short Form was developed by the New South Wales Cancer Council Health Research and Psycho-Oncology Center and the Turkish adaptation was carried out by Özbayır et al. (22). The Turkish form consists of 29 items. Cronbach's alpha values were found to be between 0.83 and 0.95. The scale is rated on a 5-point Likert scale (1=not applicable, 2=satisfied, 3=low need, 4=moderate need, 5=high need). The score that can be obtained from the scale varies between 29 and 145 points. The Turkish form of the scale consists of four sub-dimensions: "Health Service and Informing", "Psychology", "Sexuality", and "Daily Life" (22). The Cronbach alpha value of the scale was 0.853.

Statistical Analysis

Statistical Package for the Social Sciences (SPSS) for Windows, version 21.0 (IBM Inc., Armonk, NY, USA) was used to analyze the data obtained from the research. The sociodemographic and clinical characteristics of the patients were described with frequency, percentage distribution, mean, and standard deviation values. To examine the effects of sociodemographic and clinical characteristics on the level of resilience, spiritual well-being, and supportive care needs, t-test, One-Way ANOVA for data that fit the normal distribution, and Kruskal-Wallis and Mann-Whitney U test for data that were non-parametric were used. A regression analysis based on the bootstrap method was performed to determine whether psychological resilience had a mediating role in the spiritual well-being and supportive care needs of women with breast cancer. P values less than 0.05 were considered statistically significant in all results ($p < 0.05$).

Ethical Considerations

For the study, the approval of the Non-Clinical Interventional Research Ethics Committee of Afyonkarahisar Health Sciences University Clinical Research Ethics Committee (dated: July 01, 2022, and numbered: 2022/372) was obtained. Permission was obtained from the hospital where the study was conducted (dated June 21, 2022, and numbered E.91953). Before the application, the patients were informed about the purpose of the study and how it would be conducted, and their written consent was obtained. Permission was obtained from the authors for the use of scales.

Results

The mean age of the participants was 55.6 ± 21.5 years and 35.0% of the participants were over 60 years old. Of the women with breast cancer, 67.5% were married, 36.5% had two or fewer children and the same percentage had three children. In terms of education, 18.3% were illiterate, while 58.7% graduated from schools below a high school degree. Most (61.9%) were not employed. Of the participants, 71.4% were diagnosed with breast cancer, 18.3% with operated breast cancer, and 10.3% with metastatic breast cancer. The time elapsed since diagnosis in 61.9% of the women was between 2 months and 1 year and more than three-quarters (75.4%) were receiving chemotherapy treatment (Table 1).

Breast cancer was found to significantly affect the psychological resilience levels of women in terms of age, marital status, number of children, education and employment status, medical diagnoses, duration and stage of diagnosis, and treatments ($p < 0.05$). As age, number of children, duration of diagnosis, and stage of cancer increased, psychological resilience decreased. Married individuals, those with higher education levels, employed individuals, those

diagnosed only with breast cancer, and those undergoing rational drug treatment were found to have higher levels of psychological resilience (Table 1).

The level of spiritual well-being was significantly affected by women's age, marital status, medical diagnoses, duration of diagnosis, and stage of diagnosis (all $p < 0.05$). However, the number of children, education and employment status, and treatments were found to have no significant effect on spiritual well-being. It was found that as age, duration of diagnosis, and stage of cancer increased, spiritual well-being decreased. Married individuals and those diagnosed with operable breast cancer had higher levels of spiritual well-being (Table 1).

Supportive care needs were significantly affected by age, education, employment status, and cancer stage (all $p < 0.05$), while there was no significant effect on supportive care needs in terms of marital status, number of children, medical diagnosis, duration of diagnosis, and treatment options. As age and cancer stage increased, the need for supportive care also increased. In contrast, as the level of education increased, the need for supportive care decreased. Retired people had a higher need for supportive care than employed and unemployed people (Table 1).

The correlation values between the supportive care needs and sub-dimensions of the participants and the sub-dimensions of psychological resilience and spiritual well-being are given in Table 2. There was a significant negative and moderate correlation between supportive care needs and resilience ($r = -0.560$). There was a very weak but significant positive relationship between sexuality and resilience, one of the sub-dimensions of supportive care needs, and a weak and moderately significant negative relationship between other sub-dimensions. There was a significant negative but weak correlation between supportive care needs and spiritual well-being ($r = -0.385$). There was no relationship between sexuality and spiritual well-being, which are both sub-dimensions of supportive care needs. There was a significant very weak positive relationship between health services and information and spiritual well-being, which are also sub-dimensions of supportive care needs, and a weak and negative correlation between the other sub-dimensions (Table 3).

In the analysis conducted to determine the mediating role of psychological resilience in the effect of the sub-dimensions of spiritual well-being and supportive care needs, it was found that in the sub-dimensions of psychology and daily life, spiritual well-being mediated the relationship between the sub-dimensions of transcendence, harmony with nature, and anomie. Psychological resilience was shown to mediate the relationship between the sexuality sub-dimension, which is included in the supportive care needs sub-dimensions, and the transcendence and anomie dimensions of spiritual well-being. Psychological resilience also had a mediating role in the relationship between transcendence and anomie, which are sub-dimensions of spiritual well-being, and supportive care needs (Table 4).

Discussion and Conclusion

The aim of this study was to determine the mediating role of psychological resilience on the effects of spiritual well-being and supportive care needs, and the findings obtained explained the contribution of resilience to spiritual well-being and the effect of supportive care needs.

Spiritual care has an important place in health services for patients who are faced with cancer (23). Studies have focused on the quality

Table 1. Characteristics of the patients and scale score means (n = 126)

Variables	n (%)	CD-RISC-10 (Mean ± SD)	p	SWBS (Mean ± SD)	p	SCNS-SF (Mean ± SD)	p
Age (Mean ± SD) 55.6±21.5							
<50	40 (31.7)	34.5±6.0		84.6±10.1		77.7±13.4	
50–60	42 (33.3)	30.0±7.1	26.135*	82.7±8.9	3.171***	81.9±12.1	3.765***
>60	44 (35.0)	25.2±6.5	<0.001	79.5±8.9	0.045	84.5±8.7	0.026
Marital status							
Married	85 (67.5)	31.5±6.8	945.500**	83.7±9.3	2.658****	81.3±12.7	-0.280****
Single	41 (32.5)	25.7±7.2	<0.001	79.0±9.1	0.009	81.9±9.6	0.780
Number of children (n = 125)							
Two and under	46 (36.5)	32.4±6.1		81.9±10.1		77.9±12.4	
Three	46 (36.5)	29.3±8.0	4.877***	83.4±10.2	0.530***	83.7±13.4	2.284***
Over three	33 (26.2)	26.3±6.9	0.003	81.0±7.7	0.662	83.1±6.6	0.082
Education							
Illiterate	23 (18.3)	22.8±4.6		79.4±8.5		85.7±8.6	
Below high school	74 (58.7)	30.0±7.1	19.454***	82.5±9.2	1.334***	83.4±11.1	11.457***
High school and above	29 (23.0)	34.1±6.2	<0.001	83.6±10.8	0.267	73.1±11.9	<0.001
Working							
Employed	21 (16.7)	34.8±6.9		84.1±12.2		72.3±12.6	
Unemployed	78 (61.9)	29.7±7.1	10.992***	82.7±9.2	1.930***	83.0±11.5	8.632***
Retired	27 (21.4)	25.0±6.0	<0.001	79.1±7.5	0.149	84.1±8.5	<0.001
Medical diagnosis							
Breast cancer	90 (71.4)	31.2±6.9		82.9±9.5		80.1±12.4	
Operated breast cancer	23 (18.3)	27.6±7.1	11.160***	84.0±6.9	6.145***	83.5±10.4	2.436***
Metastatic breast cancer	13 (10.3)	22.0±6.5	<0.001	73.8±9.9	0.003	87.1±7.4	0.092
Diagnosis time							
2 months- 1 year	78 (61.9)	32.0±6.7	982.000**	85.0±8.9	4.642****	80.5±11.6	-1.155****
More than 1 year-2 years	48 (38.1)	25.7±6.8	<0.001	77.5±8.6	<0.001	83.0±12.0	0.250
Diagnosis stage							
Stage 1	9 (7.1)	35.8±3.5		91.1±6.2		69.5±7.8	
Stage 2	40 (31.7)	34.5±6.0		85.5±9.5		78.8±10.2	
Stage 3	29 (23.0)	30.0±6.5	19.830***	82.4±8.6	9.567***	82.8±15.8	4.566***
Stage 4	30 (23.8)	23.5±5.4	<0.001	75.0±8.0	<0.001	85.5±8.8	0.002
Unknown	18 (14.3)	25.3±5.8		81.8±6.8		84.6±8.6	
Treatment							
Chemotherapy	95 (75.4)	30.1±7.5		82.4±9.8		81.2±12.0	
Chemotherapy + surgery	20 (15.9)	27.6±6.9		83.2±6.6		82.6±9.5	
Chemotherapy + hormone therapy	6 (4.8)	28.8±7.6	0.550***	73.0±10.5	2.079***	83.3±11.2	1.640***
Chemotherapy + surgery + hormone therapy	3 (2.4)	28.0±10.5	0.699	89.3±7.5	0.088	89.6±16.1	0.169
Smart drug use	2 (1.6)	31.0±9.8		77.5±3.5		63.5±4.9	

n: number; %: percentage; SD: standard deviation; CD-RISC-10: Connor-Davidson Resilience Scale Short Form; SWBS: Spiritual Well-Being Scale; SCNS-SF: Supportive Care Needs Scale Short Form; *KW: Kruskal-Wallis; **Mann-Whitney U; ***One-Way ANOVA; ****t-test

of life of spiritual well-being in cancer patients, and its positive effect on quality of life has been reported (5, 9). In addition, it has been stated that spiritual well-being reduces the symptoms of depression in patients (24). There are no studies into the effect of spiritual well-being on supportive care needs. The present study showed that, as the level of spiritual well-being increased, the supportive care needs of breast cancer patients decreased. Spiritual well-being may have a

reducing effect on the supportive care needs of patients or given the same level of supportive care needs there may be better outcomes for those with stronger spiritual well-being.

Spirituality is a characteristic that improves quality of life by supporting adaptation and resilience in cancer patients. Supporting spirituality improves the ability to cope with negative circumstances,

Table 2. Pearson correlations between all variables (n = 126)

	1	2	3	4	5	6	7	8	9	10
1. Psychological resilience (CD-RISC-10)	1									
2. Transcendence (SWBS)	0.247**	1								
3. Harmony with nature (SWBS)	0.134	0.464**	1							
4. Anomie (SWBS)	-0.666**	-0.193*	0.233**	1						
5. Spiritual well-being (SWBS)	0.587**	0.730**	0.568**	-0.795**	1					
6. Healthcare service and informing (SCNS-SF)	-0.314**	-0.200*	-0.172	-0.269**	0.205*	1				
7. Psychology (SCNS-SF)	-0.573**	-0.051	-0.083	0.528**	-0.386**	0.317**	1			
8. Sexuality (SCNS-SF)	0.201*	-0.069	-0.046	-0.276*	0.136	0.123	0.006	1		
9. Daily life (SCNS-SF)	-0.628**	0.059	-0.022	0.613**	-0.374**	0.262**	0.586**	-0.264**	1	
10. Supportive care needs (SCNS-SF)	-0.560**	-0.113	-0.136	0.462**	-0.385**	0.719**	0.804**	0.273**	0.654**	1

CD-RISC-10: 10-item Connor–Davidson Resilience Scale; SWBS: Spiritual Well-Being Scale; SCNS-SF: Short-Form Supportive Care Needs Survey Questionnaire; *: $p < 0.05$, **: $p < 0.01$

Table 3. Regression analysis results for mediation test (n = 126)

Prediction variables	M (psychological resilience)			Y (supportive care needs)		
		b	S.E.		b	S.E.
X (spiritual well-being)	α	0.460***	0.056	c'	-0.106	0.114
M (psychological resilience)	-			b	-0.805***	0.145
Constant		$\hat{I}_M = -8.160, 4.708$			$\hat{I}_Y = 114.136***, 7.726$	
		$R^2 = 0.345$			$R^2 = 0.317$	
		$F(1;124) = 65.35; p < 0.001$			$F(2;123) = 28.66; p < 0.001$	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; S.E.: standard error; b: unstandardized beta coefficients

such as cancer (25). It was reported that the psychological resilience of patients with advanced gastrointestinal cancer increased with increased spiritual well-being (26). Psychological resilience can be improved by supporting it with spirituality (25). In another study conducted with cancer patients, it was stated that as spiritual well-being increased, psychological resilience also increased (27). A strong correlation was found between religious beliefs and psychological resilience in patients with breast cancer (28). The present study was compatible with these earlier reports and a significant effect of spiritual well-being on resilience was found. As spiritual well-being increased, psychological resilience may also increase in female breast cancer patients.

For cancer patients, psychological resilience is a dynamic process that involves confronting the evolving challenges associated with the cancer experience (29). Nursing interventions for these challenges can facilitate the process (12). In other words, the aim of improving psychological resilience is to increase quality of life rather than survival. Supportive care needs were found to be less in patients with higher personal flexibility levels. Unsupported care needs decreased as psychological resilience increased in breast cancer patients (29). In the present study, greater psychological resilience appeared to reduce supportive care needs. Thus, interventions that increase psychological resilience may reduce supportive care needs.

The most unsupported care need in cancer patients is in the field of psychological needs (29). It has been shown that spiritual well-being has a positive effect on hope through the mediating role of psychological resilience and social support in female cancer patients (8). In a study examining the effect of psychological resilience on the fear of cancer through spiritual well-being, it was concluded that stronger psychological resilience reduced the fear of cancer (30). In the present study, greater psychological resilience had a reducing effect on all aspects of spiritual well-being, especially on the psychology and daily life of supportive care needs. Therefore, interventions that increase psychological resilience can contribute to spiritual well-being and reduce the psychological care needs of breast cancer patients, improving their anxiety, worry, future uncertainty, and fear of death. It may also contribute to spiritual well-being in the daily care needs when dealing with pain, weakness, well-being, and doing work. The present study found that spiritual well-being was not affected by the clinical test results, treatment options, health workers, and psychological resilience in the hospital processes, which are among health services and information care of supportive care needs.

Table 4. Indirect effects of spiritual well-being on the sub-dimensions of supportive care needs through psychological resilience (n = 126)

	Point estimate	S.E.	BCa 95% CI	
			Lower	Upper
Health service and informing				
Transcendence	-0.010	0.133	-0.1104	0.1242
Harmony with nature	-0.093	0.336	-0.1019	0.0646
Anomie	-0.020	0.120	-0.1570	0.1613
Psychological resilience	-0.1681	0.073	-0.1630	0.0080
Psychology				
Transcendence	0.534***	0.122	0.0819	0.3078
Harmony with nature	0.658*	0.325	0.0028	0.1303
Anomie	0.519***	0.108	-0.3937	-0.1457
Psychological resilience	-0.381***	0.065	-0.2484	-0.1058
Sexuality				
Transcendence	-0.263**	0.092	-0.1725	-0.0321
Harmony with nature	-0.401	0.236	-0.0980	0.0100
Anomie	-0.265**	0.082	0.0572	0.2413
Psychological resilience	0.090	0.053	-0.0069	0.0952
Daily life				
Transcendence	0.589***	0.086	0.1493	0.2947
Harmony with nature	0.707**	0.247	0.0195	0.1253
Anomie	0.571***	0.076	-0.3806	-0.2247
Psychological resilience	-0.346***	0.048	-0.2189	-0.1030
Supportive care needs				
Transcendence	0.851**	0.277	0.1084	0.5253
Harmony with nature	0.871	0.720	-0.0717	0.2435
Anomie	0.805**	0.249	-0.7050	-0.1587

Specific and total indirect effects: 5000 bootstrap samples; BCa bias-corrected and accelerated
 Significant indirect effects, i.e., zero is not included in the confidence intervals (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$); CI: confidence interval

Finally, spiritual well-being was shown to positively affect psychological resilience in breast cancer patients, and psychological resilience and spirituality also reduced supportive care needs. Thus psychological resilience appears to contribute to reducing the supportive care needs of patients with breast cancer, by affecting spiritual well-being.

Study Limitations

This study has some limitations. First, due to the cross-sectional design of the study, no change over time could be observed in the relationship between clinical characteristics, spiritual well-being, psychological resilience, and supportive care needs of female breast cancer patients. Second, although this study was conducted in groups

specific to breast cancer patients, it included a small sample group. Since breast cancer patients were female in the participant group, no results could be obtained for male patients. Third, the results of the study explained approximately 32% of the effect of spiritual well-being through psychological resilience on supportive care needs. For the unexplained 68%, models with different variables should be created. These limitations should be taken into account when generalizing the findings of the study.

Ethics Committee Approval: For the study, the approval of the Non-Clinical Interventional Research Ethics Committee of Afyonkarahisar Health Sciences University Clinical Research Ethics Committee (dated: July 01, 2022, and numbered: 2022/372) was obtained.

Informed Consent: The patient was informed about the study, and written consent was obtained.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: Ö.S.E., H.N.E.; Concept: Ö.S.E.; Design: Ö.S.E.; Data Collection or Processing: Ö.S.E., H.N.E.; Analysis or Interpretation: Ö.S.E.; Literature Search: Ö.S.E., H.N.E.; Writing: Ö.S.E., H.N.E.

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