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The Spirituality and Anxiety Levels of Patients in the Cardiology Intensive Care Unit: How Important is This?

Kardiyoloji Yoğun Bakım Ünitesindeki Hastaların Maneviyat ve Anksiyete Düzeyleri: Ne Kadar Önemli?

ABSTRACT

Objective: Anxiety, as a cause of sudden cardiac death, is one of the significant concerns in cardiology. Anxiety can be managed through mental well-being. Therefore, this study aims to determine the effect of mental well-being on anxiety.

Method: A total of 211 patients in the cardiology intensive care unit were included in this descriptive study. For data collection, the Functional Assessment of Chronic Illness Therapy–Spiritual Well-Being 12-item scale and the State Anxiety Scale were used. Data were collected face-to-face using a questionnaire. SPSS 25 was used for analysis. Descriptive statistics, along with parametric and non-parametric tests, were employed to compare individual characteristics and scale scores. Pearson correlation analysis was used to assess the relationship between the scales.

Results: Patients in the cardiology intensive care unit had moderate spiritual well-being (30.27±5.80) and moderate anxiety (40.32±4.49). A weak positive correlation was found between spiritual well-being and anxiety (r=0.143, p<0.05).

Conclusion: It is recommended that the spiritual care needs of patients be addressed in order to reduce their anxiety.

Keywords: Anxiety, cardiology, critical care, nursing, spirituality

ÖZET

Amaç: Ani kardiyak ölüm nedeni olarak görülen anksiyete, kardiyolojinin önemli sorunlarından biridir. Kaygı, ruhsal iyilik sağlanarak kontrol edilebilir. Bu nedenle amaç, ruhsal iyilik halinin kaygı üzerine etkisini belirlemektir.

Yöntem: Tanımlayıcı tipte olan bu çalışmaya toplam 211 kardiyoloji yoğun bakım hastası dahil edildi. Verilerin toplanmasında kronik hastalık tedavisinin işlevsel değerlendirilmesi - mental iyi oluş 12 madde ölçeği ve durumluk kaygı ölçeği kullanıldı. Anket tabanlı çalışmada veriler yüzyüze toplandı. Analiz için SPSS 25 kullanıldı. Analizde tanımlayıcı istatistikler, bireysel özellikler ile ölçeklerin karşılaştırılmasında parametrik ve non-parametrik testler kullanıldı. Ölçekler arası ilişki tespitinde pearson korelasyon analizi kullanıldı.

Bulgular: Kardiyoloji yoğun bakım hastaları orta düzey spirituel iyilik hali (30.27±5.80) ve orta düzey kaygı (40.32±4.49) düzeyine sahiptir. Spiritüel iyilik hali ile kaygı arasında pozitif yönlü zayıf ilişki vardır (r=0.143, p<0.05).

Sonuç: Hastaların kaygılarının azaltılması için manevi bakım ihtiyaçlarının giderilmesi önerilir.

Anahtar Kelimeler: Kaygı, kardiyoloji, yoğun bakım, hemşirelik, maneviyat

ORIGINAL ARTICLE
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Introduction

The World Health Organization (WHO) has reported that cardiovascular diseases (CVD) are the leading cause of death from chronic conditions in both developed and developing countries. WHO recommends controlling the disease and eliminating its triggers.[1]

Anxiety is a triggering factor for CVD.[2] It is considered a potential cause of sudden cardiac death. In addition to its benign effects, anxiety has been reported to induce ventricular tachyarrhythmia through mechanisms such as increased heart rate and variability in the QT interval.[3] Literature supports the link between anxiety and sudden

death. For instance, a review of patient records involving the use of intracardiac defibrillators before and after the "September 11" attacks showed an increase in fatal arrhythmias requiring shock therapy following the event.[4,5] Another study reported that anxiety may predispose individuals to sudden death by triggering CVD through mechanisms such as metabolic abnormalities.[2]

In light of this information, anxiety—which is frequently observed in cardiology patients—should not be regarded by nurses as a purely psychosomatic symptom managed solely with medication.[6] In fact, a study on patients with heart failure found that anxiety can impair spiritual health.[7] Anxiety can also be managed through spiritual well-being, which is promoted by spiritual care. Spiritual care involves integrating personal beliefs into the treatment process to help individuals cope with physical and mental challenges—particularly emotional needs—while also fostering personal growth and self-realization. In this sense, the spirit and body are in balance.[8,9]

There are studies in the literature reporting that spiritual well-being enhances the ability to cope with anxiety, strengthens individuals, fosters hope in overcoming problems, supports positive health behaviors, and increases awareness of personal characteristics.[10,11] However, a review of the literature reveals that there are almost no studies emphasizing the importance of anxiety levels and spiritual care in relation to CVD.[12] Therefore, this research was planned to address this gap in the literature.

Aims

The aim of this study was to determine the effect of patients' spiritual well-being on anxiety, to provide data that will guide holistic nursing care, and to contribute to improving the quality of patient care. Therefore, the following questions were addressed:

1. What are the levels of anxiety and spirituality in cardiology intensive care patients?
2. Is there a significant relationship between spirituality, anxiety, and certain sociodemographic characteristics of cardiology intensive care patients?
3. To what extent is the anxiety level affected by the spirituality of cardiology intensive care patients in Türkiye, a predominantly Muslim country?

Methods

Type of Research

This study was conducted as a descriptive, cross-sectional study.[13]

Study Universe and Sample

The study population consisted of 232 patients who were treated in the Cardiology Intensive Care Unit (ICU) of the State University Faculty of Medicine Training and Research Hospital between September 1, 2021, and August 15, 2022.

The sample size was determined through a power analysis using G*Power 3.1 software. Based on the analysis, a sample size of 209 was calculated, using d=1.6600000, 100% power, and a 0.05 alpha type error. The study was completed with 211 cardiology ICU patients.

MAIN POINTS

- Patients in the cardiology intensive care unit were found to have moderate levels of both spiritual well-being and anxiety.
- A weak positive correlation was identified between spiritual well-being and anxiety levels in cardiology ICU patients.
- Patients with higher anxiety levels tended to rely more on spiritual coping mechanisms.
- Statistically significant differences in spiritual well-being were observed based on age, employment status, marital status, and household composition.
- These findings highlight the importance of integrating spiritual care into holistic nursing practices to improve psychological outcomes and overall patient care in cardiology intensive care settings.

The Inclusion Criteria for the Study Were Defined as Follows

Patients aged 18 years or older; no sensory impairments related to sight or hearing; willingness to communicate and cooperate; no history of psychiatric illness; not experiencing severe pain; being conscious; and voluntarily agreeing to participate in the study.

The Exclusion Criteria Were Defined as Follows

Patients who did not meet the inclusion criteria were excluded from the study.

Ethical Approval

Approval for the study was obtained from the Non-Invasive Clinical Research Ethics Committee of Sütçü İmam University where the research was conducted (Decision No: 01, Date: 22.06.2021). Written permission to conduct the research was also obtained from the Kahramanmaraş Sutcu Imam University Training and Research Hospital (Decision No: E-92860489-044-53515, Date: 31.08.2021). Written and verbal consent was obtained from all patients participating in the study. Additionally, the necessary permission was obtained to use the State Anxiety Inventory (SAI) and the Functional Assessment of Chronic Illness Therapy–Spiritual Well-Being 12-Item Scale (FACIT-SP-12).

Data Collection

Data for this study were collected using a Patient Information Form—prepared in accordance with the literature—the SAI, and the FACIT-SP-12. Data were collected by the researcher through face-to-face interviews with patients who were either hospitalized or about to be discharged, at appropriate times during the day.

Patient Information Form

The Patient Information Form was developed by the researcher based on relevant literature to obtain descriptive information about the patients.[14,15] This form included 11 items covering age, gender, marital status, education level, employment status, income level, history of hospitalization, the admitting clinic, and the presence or absence of any comorbidities.

Functional Assessment of Chronic Illness Therapy – Spiritual Well-Being 12-Item Scale

FACIT-SP-12 was developed by Canada et al.[16] in 2008. Validity and reliability studies of the Turkish version were conducted by Ay et al.[17] FACIT-SP-12 consists of 12 items and three subdimensions: meaning (items 2, 3, 5, 8), peace (items 1, 4, 6, 7), and faith (items 9, 10, 11, 12). Responses are rated on a 5-point Likert scale ranging from 0 to 4. Each subscale is scored within a range of 0–16 points. Total scores range from 0 to 48, with higher scores indicating greater spiritual well-being. The Cronbach's alpha value of the original scale is 0.80.[17] In this study, the Cronbach's alpha value was calculated as 0.687.

State Anxiety Inventory

The SAI was developed by Spielberger[18] in 1970. It was adapted into Turkish by Öner and Le Compte.[19] The scale measures levels of state and trait anxiety in both patients and non-patients. It is a self-reported scale consisting of short statements. The SAI evaluates how an individual feels at a given moment using 20 items, with responses rated on a 4-point Likert-type scale (1=never to 4=completely). There are two types of statements: direct statements, which reflect negative emotions, and reversed statements, which reflect positive emotions. Items 1, 2, 5, 8, 11, 15, 16, 19, and 20 are the reversed items on the scale. The total scores of the direct and reversed statements are calculated separately. The total score of the reversed items is subtracted from the total score of the direct items, and a predetermined constant is added to the result. The fixed value for the SAI is 50. The final score represents the individual's level of anxiety. Total scores range from 20 to 80, with higher scores indicating higher levels of anxiety.[20] The original scale has a Cronbach's alpha value of 0.96.[21] In this study, the Cronbach's alpha value was calculated as 0.977.

Statistical Analysis

The data were analyzed using the statistical software IBM SPSS Statistics Standard Concurrent User Version 25 (IBM Corp., Armonk, New York, USA). Descriptive statistics were presented as mean±standard deviation, minimum and maximum values, number (n), and percentage (%). The Kolmogorov-Smirnov test was used to assess the normality of data distribution. To compare mean questionnaire scores between two independent groups and among three or more groups, the Student's t-test, Mann-Whitney U test, one-way ANOVA, and Kruskal-Wallis test were applied. In comparisons involving three groups, the Bonferroni correction was used to identify which group(s) contributed to the significant differences. When three or more groups were compared, statistically significant differences were indicated in the tables using superscripts such as "a, b, c, d" and combinations like "a-b, c" to specify which groups differed. For example, the code "a-b, c" indicates a statistically significant difference between groups "a" and "b" and group "c," but no significant difference between "b" and "c." To evaluate relationships between the SAI and the subscales of the FACIT-SP-12, Pearson correlation analysis was conducted. In all analyses, a significance level of $\alpha<0.05$ was considered statistically significant.

Table 1. Sociodemographic characteristics of the patients

Characteristics	n	%
Diagnosis		
Arrhythmia	26	12.3
Coronary artery disease	148	70.1
Other	10	4.7
Age, years		
≤64	113	53.6
≥65	98	46.4
Gender		
Female	72	34.1
Male	139	65.9
Educational status		
Illiterate	34	16.1
Literate	24	11.4
Primary school	109	51.7
Secondary school	22	10.4
High school	22	10.4
Marital status		
Married	200	94.8
Single	11	5.2
Employment status		
Employed	48	22.7
Not employed outside the home	163	77.3
Occupation		
Manual worker	7	3.3
Clerical worker	13	6.2
Self-employed	18	8.5
Retired	81	38.4
Housewife	67	31.8
Other	25	11.8
Income status		
Income lower than outgoings	184	87.2
Income equal to outgoings	27	12.8
Place of residence		
Provincial centre	105	49.8
Town	92	43.6
Village	14	6.6
People living in the same home		
Spouse	121	57.3
Spouse and children	35	16.6
Children	46	21.8
Other relatives	9	4.3

n: Number; %: Percentage.

Results

Some descriptive characteristics of the patients are shown in Table 1. Of the total patients in the study, 70.1% (n=148) had a diagnosis of coronary artery disease, 53.6% were aged ≤64 years, 65.9% (n=139) were male, 94.8% (n=198) were married,

Table 2. Mean scale points

Scales	n	Min	Max	Mean±SD
Peace	211	3	15	9.61±2.44
Meaning	211	0	13	10.02±2.51
Faith	211	3	16	10.64±2.27
FACIT-SP-12	211	10	41	30.27±5.80
SAI	211	33	51	40.32±4.49

SAI: State Anxiety Inventory; FACIT-SP-12: Functional Assessment of Chronic Illness Therapy–Spiritual Well-Being 12-Item Scale; Min: Minimum; Max: Maximum; SD: Standard deviation.

77.3% (n=163) were not working, 38.4% (n=81) were retired, 87.2% (n=184) had an income level below their outgoings, 49.8% (n=105) lived in the provincial center, and 57.3% (n=121) lived with their spouse (Table 1).

The mean scale scores are shown in Table 2. The mean score of the faith subscale of the FACIT-SP-12 (10.64±2.27) was found to be higher than those of the other subscales. The mean SAI score (40.32±4.49) indicated a moderate level of anxiety (Table 2).

Comparisons of mean scale scores with various sociodemographic factors are shown in Table 3. A significant difference was found in relation to diagnosis, gender, and place of residence. Patients aged ≤64 years showed statistically significant differences in the overall FACIT-SP-12 score (p=0.005) and the meaning subscale (p=0.000). In comparisons by education level, statistically significant differences were observed in the FACIT-SP-12 (p=0.001) and the meaning subscale (p=0.000), with the difference attributed to the group of illiterate patients. Regarding marital status, statistically significant differences were found in the FACIT-SP-12 (p=0.012) and the peace subscale (p=0.000), originating from the group of single patients. Analysis by employment status revealed statistically significant differences in the FACIT-SP-12 (p=0.000) and in all subscales: peace (p=0.000), meaning (p=0.000), and faith (p=0.000). These differences were attributed to the unemployed patient group. In comparisons by occupation, statistically significant differences were observed in the FACIT-SP-12 (p=0.008) and the meaning subscale (p=0.005). In terms of income level, a statistically significant difference was found in the faith subscale (p=0.001), attributed to the low-income group. Statistically significant differences were also found among patients living with their spouse in the FACIT-SP-12 (p=0.001) and across all subscales: peace (p=0.025), meaning (p=0.000), and faith (p=0.029). A statistically significant difference was also observed in the SAI scores for those living with their spouse (p=0.020).

The correlation analysis results are shown in Table 4. A weak positive correlation was identified between the SAI and FACIT-SP-12 (r=0.143, p=0.038).

Discussion

Patients' spiritual beliefs can enhance their awareness of personal strengths and provide hope and resilience in overcoming problems. In this way, patients who achieve psychological well-being may cope with anxiety more effectively.[22]

In the comparison of the SAI results in this study, no statistically significant differences were found in relation to diagnosis, age, gender, place of residence, education level, marital status, employment status, occupation, or income level (p>0.05). A statistically significant difference in SAI scores was found only in relation to living with a spouse (p<0.05). In the study by Zarrin-Ghabaee[23] in 2016, no statistically significant difference was found between mental health and gender. Similarly, in a study by Elham et al.[22] in 2015, no statistically significant differences were found between age, gender, occupation, education level, and anxiety, which supports the findings of the current study. However, that same study did report a statistically significant difference between marital status and anxiety. Living with someone and feeling their support may help reduce anxiety. This difference in marital status may be attributed to that factor. Dadhwal et al.[24] in 2022 also reported that women with spousal support were stronger and experienced less anxiety.

Görücü[15] in 2019 found that women had higher anxiety scores than men, but reported no significant differences in terms of education level and marital status. While the findings related to education level and marital status support our study, the gender-related difference does not. We believe this inconsistency may be due to differences in the study sample, individual and cultural characteristics, and role distinctions. Our study was conducted on patients receiving care, not on caregivers. Additionally, while caregivers are often women, most of the care recipients in our study were men. Regardless of one's intellectual strengths, individual differences such as gender can influence anxiety levels due to the physiological and psychological effects of illness.[25] In the current study, the difference in the FACIT-SP-12 scores according to age was found to be statistically significant (p=0.005), with the difference originating from the meaning subscale (p=0.002). Seshadri[26] in 2023 reported that spiritual well-being varies by age. Similarly, Hvidt et al.[27] in 2019 found a relationship between age and spirituality. Daştan[14] in 2010 reported that elderly patients preferred spiritual coping methods more than younger patients. In our study, spiritual well-being was higher among patients under 65 years of age. These results suggest that patients over the age of 65 may require more spiritual support.

In the current study, FACIT-SP-12 scores also differed significantly by employment status (p=0.000). This difference was observed across all subdimensions: peace (p=0.000), meaning (p=0.000), and faith (p=0.000). Patients who were employed had higher mean FACIT-SP-12 scores than those who were unemployed. Other studies in the literature have similarly shown that working individuals tend to have stronger spiritual well-being.[28,29] These findings support the results of the current study. It may be said that working life nurtures individuals spiritually, thereby strengthening their resilience.

FACIT-SP-12 scores also varied significantly by marital status and household composition (p<0.05). Damianakis et al.[30] in 2012 reported that the loss of a spouse can negatively affect an individual's spiritual well-being. The presence of a supportive spouse or significant other can nurture patients' spiritual well-being, making them stronger and better

Table 3. Comparisons of the mean scale points with some sociodemographic characteristics of the patients

Characteristics	Peace Mean/SD	Meaning Mean/SD Mean Rank/ Min–Max	Faith Mean/SD Mean Rank/ Min–Max	FACIT-SP-12 Mean/SD	SAI Mean/SD
Age, years					
≤64	9.91±2.30	10.61±2.40	10.79±2.41	31.31±5.83	40.47±4.63
≥65	9.26±2.26	9.34±2.47	10.46±2.09	29.08±5.55	40.14±4.35
Test/p	t=1.925/0.056	t=3.757/**0.000***	t=1.044/0.298	t=2.840/**0.005***	t=0.539/0.591
Educational status					
Illiterate	8.79±2.47	68.57 (0-13)[a]	86.41 (3-15)	27.20±5.81[a]	38.64±4.64
Literate	9.08±2.28	84.46 (6-12)[b]	95.71 (7-15)	28.75±5.10[b]	40.54±4.43
Primary school	9.80±2.50	111.71 (4-13)[c]	109.39 (3-16)	30.76±5.97[c]	40.85±4.37
Secondary school	9.95±2.27	128.52 (5-13)[d]	123.80 (7-15)	32.27±4.86[d]	40.59±4.82
High school	10.13±2.25	136.52 (6-13)[e]	112.89 (7-15)	32.31±4.44[e]	39.77±4.29
Test/p**	*f*=1.789/0.132	χ^2=26.927/**0.000**[a-b,c,d,e]	χ^2=6.905/0.141	*f*=4.618/**0.001**	*f*=1.698/0.152[a-b,c,d,e]
Marital status					
Married	9.76±2.35	10.07±2.49	106.66 (3-16)	30.51±5.68	40.37±4.53
Single	6.90±2.62	9.09±1.80	93.95 (3-14)	26.00±6.51	39.36±3.66
Test/p	t=3.885/**0.000***	t=0.971/0.207	z=967.500/0.494	t=2.546/**0.012***	t=0.725/0.469
Employment status					
Yes	10.72±1.55	142.14 (6-13)	11.91±1.78	34.12±3.23	40.89±3.96
No	9.28±2.56	95.36 (0-13)	10.26±2.26	29.14±5.90	40.15±4.63
Test/p	t=3.707/**0.000**	z=-4.822/**0.000**	t=4.627/**0.000**	t=5.589/**0.000**	t=1.005/0.742
Occupation					
Manual worker	10.00±2.44	115.86 (8-12)[a]	104.64 (8-12)	115.64 (23-36)[a]	38.85±2.67
Clerical worker	11.07±1.60	152.50 (10-13)[b]	108.85 (7-12)	144.08 (27-37)[b]	41.30±4.02
Self-employed	10.38±2.09	137.44 (6-13)[c]	146.22 (7-16)	145.42 (21-41)[c]	42.33±4.80
Retired	9.54±2.53	103.66 (4-13)[d]	98.81 (3-16)	100.91 (12-41)[d]	40.74±4.46
Housewife	9.46±2.36	95.16 (4-13)[e]	104.54 (6-15)	97.80 (17-38)[e]	39.88±4.66
Other	8.80±2.69	93.04 (0-13)[f]	103.14 (3-16)	93.60 (10-39 [f]	38.60±3.98
Test/p	*f*=1.988/0.082	χ^2=16.934/**0.005**[b-d,a,c,e,f]	χ^2=9384/0.095	χ^2=15.611/**0.008**[c-e,a,b,d,f]	*f*=2.046/0.074
Income status					
Income lower than outgoings	9.57±2.47	9.94±2.52	10.44±2.27	29.95±5.87	40.14±4.57
Income equal to outgoings	9.88±2.25	10.59±2.39	12.00±1.75	32.48±4.76	41.55±3.79
Test/p	t=0.630/0.529	t=-1.262/0.208	t=-0.405/**0.001***	t=-2.130/0.034	t=-1.531/0.127
People living in the same home					
Spouse	9.86±2.36[a]	116.75 (4-13)[a]	108.60 (3-16)[a]	114.66 (12-41)[a]	41.07±4.33[a]
Spouse and children	9.71±2.35[b]	115.91 (4-13)[b]	125.50 (6-16)[b]	119.57 (18-37)[b]	39.45±4.40[b]
Children	9.28±2.49[c]	75.38 (4-12)[c]	88.92 (7-14)[c]	80.63 (17-36)[c]	38.86±4.60[c]
Other relatives	7.44±2.74[d]	79.39 (0-129)[d]	82.44 (3-12)[d]	66.44 (10-36)[d]	41.00±4.76[d]
Test/p	*f*=3.188/**0.025**[d-a,b,c]	χ^2=19.178/**0.00**[c-a,b,d]	χ^2=9.039/**0.029**[d-a,b,c]	χ^2=15.96/**0.001**[d-a,b,c]	*f*=3.337/**0.020**[c-a,b,d]

t: Independent Samples T test; z: Mann-Whitney U; *: P<0.05; **: P<0.001; *f*: One Way ANOVA; χ^2: Kruskal-Wallis test, (a, b, c, d, e, f)=The difference between the groups expressed by the letters is statistically significant at p<0.05 after Bonferroni correction. SAI: State Anxiety Inventory; FACIT-SP-12: Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being 12-Item Scale; Min: Minimum; Max: Maximum; SD: Standard deviation.

Table 4. Correlation analysis of the scales

	Peace	Meaning	Faith	FACIT_SP_12
SAI				
r	0.129	0.131	0.082	0.143*
p	0.062	0.058	0.237	**0.038**

SAI: State Anxiety Inventory; FACIT-SP-12: Functional Assessment of Chronic Illness Therapy–Spiritual Well-Being 12-Item Scale; *: Pearson Correlation analysis, p<0.05.

equipped to cope with life's challenges. In this study, a weak positive correlation was found between SAI and FACIT-SP-12. Spirituality plays an important role in managing anxiety. Metin et al.[7] in 2020 reported a moderately significant negative correlation between spiritual well-being and anxiety among patients' relatives and caregivers. They recommended that "as spirituality is related to anxiety symptoms in both cardiac patients and family carers, additional interventions focusing on spirituality should be integrated to improve the psychological health and quality of life of cardiac patients and family carers."

In the study conducted by Görücü[15] in 2019, a weak but significant positive relationship was found between death anxiety and spiritual well-being. Rababa et al.[31] in 2021, in a study on geriatric patients during the COVID-19 pandemic, also found a significant correlation between spiritual well-being and death anxiety. Solaimanizadeh et al.[32] in 2020 reported that anxiety and spirituality are related, emphasizing the importance of strengthening spiritual well-being. Similarly, Behmanesh et al.[33] in 2024 found a relationship between anxiety and spiritual health. These studies support the present findings. The positive relationship between spirituality and anxiety suggests that patients tend to rely more on spiritual coping mechanisms when their anxiety levels rise. Given the impact of anxiety on cardiologic parameters, it is clear how crucial it is to address the spiritual care needs of patients.

Limitations

Data for this study were collected from a single center; therefore, the results cannot be generalized to all cardiology ICU patients. The study is subject to time and sample limitations, as it was conducted in a single institution during a specific time period. Another limitation is that data were collected only from hospitalized patients, and the information regarding spirituality and anxiety levels was based on self-reports.

Conclusion

Cardiology intensive care unit patients exhibit moderate levels of spiritual well-being and anxiety. A weak positive correlation was found between spiritual well-being and anxiety. The results suggest that patients tend to use more spiritual coping mechanisms as their anxiety levels increase. To promote body-spirit balance and improve the quality of nursing care, it is recommended that nurses receive practical training to enhance their understanding of spiritual care and its application in clinical settings.

Ethics Committee Approval: Approval for the study was obtained from the Non-Invasive Clinical Research Ethics Committee of Sütçü İmam University where the research was conducted (Decision No: 01, Date: 22.06.2021). Written permission to conduct the research was also obtained from the Kahramanmaraş Sütçü İmam University Training and Research Hospital (Decision No: E-92860489-044-53515, Date: 31.08.2021).

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