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THE EFFECT OF SPIRITUALITY ON LONELINESS AND DEPRESSION IN HEMODIALYSIS PATIENTS: A CROSS-SECTIONAL STUDY

HEMODİYALİZ HASTALARINDA MANEVİYATIN, YALNIZLIK VE DEPRESYONA ETKİSİ: KESİTSEL BİR ÇALIŞMA

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ABSTRACT

This study was conducted to determine the effects of spirituality on loneliness and depression in hemodialysis patients with 115 patients living in Kars between December 2022 and January 2023. The study was conducted as a cross-sectional study. It was determined that the mean spirituality score was higher (53.08±4.00), loneliness (10.36±2.01) and depression mean scores were lower (4.02±1.88) in those living with their spouses and children, and a statistically significant difference was found. There was a negative correlation analysis between the participants' Spirituality Index of Well-Being (SIWB) total score average and SIWB-self-efficacy score average with UCLA Loneliness Scale (UCLA) ($r=-0.627$, $p<0.000$) and Geriatric Depression Scale (GDS) ($r=-0.524$, $p<0.000$). There was a negative correlation analysis between the SIWB-life scheme score average with UCLA ($r=-0.732$, $p<0.000$) and GDS ($r=-0.530$, $p<0.000$). A statistically significant negative correlation was observed between SIWB and its sub-dimensions and the individuals' UCLA and GDS score averages ($p<0.05$). As a result of the regression analysis, a significant regression model ($F= 28.66$, $p<0.001$) and 29% of the variance in the dependent variable were found to be explained by the independent variables. It is recommended that research be planned regarding spiritual care in elderly patients receiving hemodialysis treatment.

ÖZET

Bu araştırma, hemodiyaliz hastalarında maneviyatın, yalnızlık ve depresyona etkisini belirlemek amacıyla Aralık 2022-Ocak 2023 tarihleri arasında Kars'ta yaşayan 115 hasta ile yürütülmüştür. Araştırma kesitsel tiptedir. Katılımcılardan eş ve çocukları ile yaşayanlarda maneviyat puan ortalamasının yüksek (53.08±4.00), yalnızlık (10.36±2.01) ve depresyon puan ortalamalarının düşük olduğu (4.02±1.88) ve istatistiksel olarak anlamlı bir fark olduğu saptanmıştır. Katılımcıların Spiritüel İyi Hissedilme Ölçeği (SİÖ) toplam puan ortalaması ve SİÖ-öz yeterlilik puan ortalaması ile UCLA Yalnızlık Ölçeği (UCLA) ($r=-0.627$, $p<0.000$) ve Geriatrik Depresyon Ölçeği (GDÖ) ($r=-0.524$, $p<0.000$) arasındaki negatif korelasyon vardır. SİÖ-yaşam şeması puan ortalaması ile UCLA ($r=-0.732$, $p<0.000$) ve GDS ($r=-0.530$, $p<0.000$) arasında negatif korelasyon analizi bulunmaktadır. SİÖ ve alt boyutları ile bireylerin UCLA ve GDÖ puan ortalamaları arasında negatif yönde istatistiksel olarak anlamlı bir ilişki gözlenmiştir ($p<0.05$). Hemodiyaliz hastalarında maneviyatın algılanan yalnızlık ve depresyon ile ilişkisinin incelendiği regresyon analizine göre ($F= 28.66$, $p<0.001$), bağımlı değişkendeki varyansın %29'u bağımsız değişkenler tarafından açıklanmaktadır. Hemodiyaliz tedavisi alan yaşlı hastalarda, manevi bakımı konusunda araştırmaların planlanması önerilir.

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INTRODUCTION

End-stage renal failure (ESRD) increases exponentially due to the increase in chronic diseases such as aging of the population, diabetes, and hypertension (Bogataj et al., 2022; Chu & DeMarco, 2019). The number of people receiving ESRD treatment in the world in 2030 is expected to reach 5.5 million (The Minister of Health, 2022). During this period, patients need renal replacement therapies (RRT), hemodialysis (HD), peritoneal dialysis (PD) or kidney transplantation to survive. Hemodialysis, is one of the most preferred renal replacement treatment methods in the treatment of end-stage renal failure. The vast majority of ESRD patients in Turkey continue their lives with hemodialysis (Karadakovan & Kaymakçı, 2017). Although hemodialysis treatment prolongs the life expectancy of patients, it negatively affects the life quality of the individual. Hemodialysis treatment causes physical, psychological, and social negativities (Kramer et al., 2020). Changes in the body image, hospital-dependent lifestyle, dietary restriction, distancing from work and social life and psychological problems also occur in patients. Mental problems that may be seen in these patients may be anxiety, depression, social exclusion, inadequacy and loneliness, and refusal of treatment or incompatibility with treatment (Avdal et al., 2020; Niu & Liu, 2017; Kramer et al., 2020).

Depression is considered as the second most common medical problem after hypertension in dialysis patients (Ng et al., 2021). The dialysis adherence of patients with depression is impaired and the likelihood of discontinuation of treatment increases (Tavassoli et al., 2019). Additionally, dialysis patients have a 1.5-3 times higher rate of hospitalization for psychiatric reasons compared to individuals with other chronic diseases (Moura et al., 2020; Bayin & Top, 2020). The causes of depression are fatigue, sleep disorders, difficulties in adapting to treatment, changes in family roles and social relationships, loneliness, limitations in daily activities, uncertainty about the future, unemployment, dependence on healthcare professionals and decreased physical and sexual function (Mosleh & Alenezi, 2020; Khan et al., 2019;

Gerogianni et al., 2018). However, early diagnosis and assessment of depression is difficult in this patient group because depression and uremic symptoms overlap each other (Gerogianni et al., 2018). Additionally, the severity of depression may increase in patients with insufficient social support and loneliness (Alradaydeh & Khalil, 2018).

Spirituality is expressed as an attempt to understand the meaning and purpose of life (Fradelos et al., 2022). Spirituality is to support people in points of religion and belief during a crisis, to advise them, to guide them in fulfilling their religious rituals, and to accompany them in naming the purpose and meaning of life (Murgia et al., 2020). Additionally, spirituality supports patients in terms of providing a positive perspective on themselves and raising their personal respect at a positive level in crisis situations (Darvishi et al., 2020; Murgia et al., 2020). It is to provide belief and religious support to people in unplanned situations (surgery, disease, disability, etc.) that occur in distressed, painful, fearful and sad periods, to guide them in fulfilling their worship and customs, to be effective in solving questions and problems, to stand by them, to support them in giving meaning and a new meaning to their lives. Additionally, spiritual care helps sick individuals find purpose and meaning in life and learn appropriate coping strategies with their diseases (Fradelos et al., 2022). Spiritual practices have an important and effective power in coping with stress, reducing mortality rates, eliminating depression, and healing diseases (Okhli et al., 2019). While spirituality helps patients overcome the realities of illness and pain and find meaning, purpose and direction in the context of their own diseases in their lives, it is used by individuals as a source of power and support to help cope with the stressful effects of psychosocial problems associated with physical diseases (Rambod et al., 2020). As a result of literature review, there was no study examining the effect of spirituality on loneliness and depression in hemodialysis patients. This study was conducted to determine the effect of spirituality on loneliness and depression in hemodialysis patients.

MATERIAL AND METHOD

Study Type

This research was conducted in a cross-sectional design.

Population and Sampling

The study population consisted of 135 patients undergoing hemodialysis treatment. The sample of the study was calculated at 95% confidence interval with the sampling method with known population and it was concluded that the sample should be at least 100 patients. Since the entire population was planned to be included in the sample, no sampling method was used. The sample was completed with 115 volunteers who met the research criteria during the study. Inclusion criteria for the study were as follows; ≥ 60 years of age, proficient in reading and writing in Turkish, receiving hemodialysis treatment at least 6 months and at least 3 times a week, possessing literacy skills, not having any physical (speech, hearing disorder, etc.) or neurological disorder that prevents filling in the research forms, not having a psychiatric diagnosis, and volunteering to participate in the study.

Data Collection Tools

The data were collected with the Personal information form, Spiritual Index of Well-Being Scale, UCLA Loneliness Scale and Geriatric Depression Scale.

Personal Information Form

This form, which was created by the researcher by considering the literature to collect the research data, includes questions about the patients and the characteristics of the disease (Musa et al., 2018, Bogataj et al., 2022).

Spirituality Index of Well-Being (SIWB)

Spirituality Index of Well-Being (SIWB) was developed by Daaleman & Frey (2004) to measure spiritual well-being in the elderly. The Chinese version was later made in Taiwan in 2016 by Lee and Salman. The scale was adapted to Turkish by Serbest & Şahin (2021) in 2018

with a validity-reliability study. The scale consisted of 12 items. It is a five-point Likert-type scale ranging from 1 'strongly agree', 2 'agree', 3 'neutral', 4 'disagree', and 5 'strongly disagree' and consists of 2 sub-dimensions. First Dimension refers to the sub-dimension of self-efficacy. This dimension consists of 7 items. It consists of items 1, 2, 3, 4, 5, 6, and 7. Second 2nd dimension refers to the sub-dimension of the life scheme. It consists of items 8, 9, 10, 11, and 12. While the self-efficacy sub-dimension measures the self-efficacy of the individual regarding life, the life scheme sub-dimension measures the individual's perception of making sense of his/her life. The minimum and maximum scores to be obtained from SIWB are between 12–60. The higher the score, the higher the spiritual well-being of the elderly. The total Cronbach's Alpha coefficient of the scale is 0.95, Cronbach's Alpha coefficient of "self-efficacy" sub-dimension is 0.93 and Cronbach's Alpha coefficient of the "life scheme" sub-dimension is 0.93 (Serbest & Şahin, 2018). In this study, SIWB Cronbach's Alpha was 0.89.

UCLA Loneliness Scale (UCLA)

Demir made the Turkish adaptation of UCLA (1989) which was developed by Russell et al. (1978). The scores for each item ranged from 1 to 4 and consisted of a total of 20 items. The low score to be obtained from the scale indicates a low level of loneliness. The lowest score that can be obtained from the scale is 20. As the scale score increases, the level of loneliness increases and the highest score to be obtained from the scale is 80. The scale score between 20 and 40 indicates a low level of loneliness, between 41 and 60 indicates a moderate level of loneliness and 61–80 indicates a high level of loneliness. The Cronbach's Alpha reliability coefficient of the scale is 0.96 (Demir, 1989). In this study, SIWB Cronbach's Alpha was 0.84.

Geriatric Depression Scale (GDS)

The Turkish validity and reliability study of the Geriatric Depression Scale was conducted by Ertan et al. (1997) which was firstly developed by Yesavage et al. in 1983 to measure the depression status of the elderly population. The scale consists of a total of 24 questions. While

answering the questions, the individual expresses how he/she feels in the last week of his/her life. Each item is answered as "yes" or "no". While scoring the scale, "1 point" is given for each response expressing depression, "0" is given for the other response, and the total score is calculated. Inverse expressions existed on the scale. Therefore, 1 point was given for a "no" answer to questions 1, 2, 7, 9, 15, 19, 21, 27, 29, and 30, 0 points for a "yes" answer, and 1 point was given for "yes" answer to questions 3, 4, 5, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28, 0 points for "no" answer. The lowest score that can be obtained from the scale is 0 and the highest score is 30. The scale was scored as follows: 0-10 points = no depression, 11-13 points = probable depression, 14 and above points = definite depression. As the scale score increases, the depressive mood increases. In the validity and reliability study conducted by Ertan et al., Cronbach's Alpha coefficient was 0.92 (Ertan et al., 1997). In this study, SIWB Cronbach's Alpha was 0.88.

Data Collection

The population of the study consisted of patients living in a city in the eastern part of Turkey between December 2022 and January 2023. The researcher collected the data face-to-face in the HD units of the relevant hospitals. Interviews were conducted in HD units after the purpose of the study was explained to the patients and their consent was obtained. The patients completed these questionnaires by themselves. Each interview lasted approximately 25–30 minutes.

Data Analysis

The data obtained from the research were analyzed using descriptive tests in the SPSS 21 package program. Descriptive statistics, percentages, numbers, mean values and standard deviation were used for the variables. The suitability of numerical data for normal distribution was evaluated with Skewness (-1.73 to -0.34) and Kurtosis (-1.04 to 1.88) and a normal distribution was determined. Standard deviation, mean, minimum and maximum values were

calculated for the scores obtained from the scales. Multivariate linear regression analysis was applied to evaluate the effect of spirituality on the loneliness and depression levels of the patients. $p < 0.05$ was considered statistically significant in the evaluation of the data.

Limitations of the Study

The strength of this study was that all patients receiving treatment in the HD unit where the study was conducted were Muslim. The results of this research can be generalized to Muslim patients living in the city. The limitation of this study was that the study was conducted in a single center. Additionally, the absence of patients belonging to different religions in the hospital where the study was conducted constitutes a limitation.

Ethical Committee Approval

Before starting the study, written permission was obtained from the non-interventional research ethics committee of Kafkas University Faculty of Health Sciences (31/01/2022 and number: 81829502.903/11) and the hospital where the study will be conducted. By providing general information about the study to the patients participating in the study, the principle of "Informed Consent" was followed, and the principle of "Confidentiality and Protection of Confidentiality" was followed by stating that the information obtained from the patients would be kept confidential. Informed consent has been approved by participants. The study was conducted in line with the principles of the Declaration of Helsinki, and verbal and written informed consent of the participants was obtained.

RESULTS

The patients of 52.2% were male, 40.0% were primary school graduates, 74.7% were married, 73.9% had income equal to their expenses, 71.4% were unemployed, 34.7% lived in the city center, 67.8% had comorbidities, 52.1% lived with their spouses and children. It was determined that the mean age of the participants was 68.35 ± 13.17 years, the mean age was 5.78 ± 5.12 years, and they had an average of 3.25 ± 1.47 children.

Table 1*Description of Patients Characteristics (n=115)*

	n	%	SIWB X± SD	UCLA X± SD	GDS X± SD
Gender					
Female	55	47.8	48.45±5.36	28.30±3.12	6.03±2.06
Male	60	52.2	49.09±5.08	28.12±3.20	6.11±2.33
Test and p			t=0.189 p>0.005	t=0.138 p>0.005	t=0.145 p>0.005
Educational Status					
Literate	41	35.6	52.30±5.24	22.41±3.85	6.41±3.85
Primary school	46	40.0	51.12±4.96	22.23±3.40	6.23±3.40
High school and above	28	24.4	52.45±5.22	22.34±3.10	6.34±3.10
Test and p			F=0.294 p>0.005	F=0.364 p>0.005	F=0.352 p>0.005
Marital Status					
Married	86	74.7	52.45±6.04	18.11±3.65	6.01±2.56
Single	29	25.3	51.88±5.41	19.24±4.09	7.12±2.85
Test and p			t=0.116 p>0.005	t=0.239 p>0.005	t=0.284 p>0.005
Perceived level of income					
Income > expenditure	16	13.9	44.20±7.11	32.66±3.10	8.03±2.74
Income = expenditure	85	73.9	43.60±5.07	32.09±3.07	8.63±2.85
Income < expenditure	14	12.2	42.65±5.66	32.86±3.88	8.19±2.27
Test and p			KW=0.252 p>0.005	KW=0.342 p>0.005	KW=0.367 p>0.005
Work Status					
Working	33	28.6	41.06±9.46	34.88±4.66	14.09±2.30
Unemployed	82	71.4	42.32±9.74	35.78±4.11	15.96±2.41
Test and p			t=0.254 p>0.005	t=0.327 p>0.005	t=0.428 p>0.005
Patient's residence					
Province	40	34.7	51.41±4.85	30.23±5.66	12.87±4.17
District	36	31.3	50.13±4.07	31.88±5.12	11.63±4.63
Village	39	34.0	50.66±4.20	30.45±5.07	12.96±4.96
Test and p			F=0.461 p>0.005	F=0.523 p>0.005	F=0.514 p>0.005
Medical comorbidity status					
Yes	78	67.8	46.40±7.56	54.02±4.30	12.89±5.11
No	40	32.2	46.80±8.09	53.12±4.26	12.71±5.23
Test and p			t=0.462 p>0.005	t=0.321 p>0.005	t=0.404 p>0.005
Patients who live with					
Spouse and children	60	52.1	53.08±4.00	10.36±2.01	4.02±1.88
Parents	25	21.7	41.03±4.66	20.66±2.23	8.11±1.03
Alone	20	17.3	38.12±4.08	21.89±2.04	8.20±1.13
Other	10	8.9	36.52±4.96	21.15±2.43	8.05±1.21
Test and p			KW=21.321 p<0.000	KW=20.643 p<0.000	KW=24.814 p<0.000

When the socio-demographic characteristics of the patients participating in the study were compared with the SIWB, UCLA and GDS scale score averages, it was found that the mean spirituality score was high (53.08 ± 4.00), loneliness (10.36 ± 2.01) and depression score averages lower (4.02 ± 1.88) in those living with their spouses and children, and a statistically significant difference was found (Table 1, $p < 0.000$). It was determined that there was no statistically significant difference between the mean scores of the participants on the SIWB, UCLA and GDS scales and their gender, education status, marital status, income level, employment status, comorbidity status and place of residence (Table 1, $p > 0.05$).

Table 2

Distribution of the Spiritual Well-Being Scale, Loneliness Scale and Geriatric Depression Scales Total Mean Scores

Scales	Mean $\pm$ SD	Median	Min-max
SIWB total score	42.73 $\pm$ 9.25	43.00	12-60
Self-efficacy subscale score	22.95 $\pm$ 4.85	23.00	7-35
Life scheme subscale score	19.78 $\pm$ 4.40	20.00	5-25
UCLA total score	24.21 $\pm$ 5.48	25.00	20-80
Geriatric Depression total score	9.17 $\pm$ 6.08	10.00	0-30

min-max: minimum-maximum

SD: Standard deviation

Table 2 shows the distribution of the participants' SIWB and sub-dimension total mean scores, and the mean scores they received from the UCLA and GDS scales. The SIWB total mean score of the individuals was 42.73 ± 9.25 , the SIWB-Self-efficacy subscale mean score was 22.95 ± 4.85 , SIWB-Life scheme subscale mean score was 19.78 ± 4.40 , UCLA total mean score was 24.21 ± 5.48 and GDS total mean score was 9.17 ± 6.08 .

Table 3

The Relationship Between Patients' Spiritual Well-Being Scale, Loneliness and Geriatric Depression Scales Total Score Means

SIWB Sub-Dimensions	Self-efficacy		Life scheme	
	r	p	r	p
UCLA Scale	-0.627	p<0.000	-0.732	p<0.000
Geriatric Depression Scale	-0.524	p<0.000	-0.530	p<0.000

r: Pearson Correlation Coefficient

Table 3 shows the correlation analysis between the participants' SIWB total score average and SIWB-self-efficacy score average and UCLA ($r=-0.627$, $p<0.000$) and GDS ($r=-0.524$, $p<0.000$). SIWB-life scheme score average and UCLA ($r=-0.732$, $p<0.000$) and GDS ($r=-0.530$, $p<0.000$). A negative and statistically significant relationship was observed between the SIWB and its sub-dimensions and the mean UCLA and GDS scores of the individuals ($p<0.05$).

Table 4

Regression Analysis of Factors Affecting Spirituality (n=115)

Variables	β	SD	Beta	t	p	95% CI	
Constant	102.325	1.408		29.948	p<0.001	11.45	28.66
Loneliness	1.085	275	-0.288	-1.040	p<0.001	1.09	9.41
Depression	1.160	295	-0.318	-2.534	p<0.001	2.05	9.73

Dependent variable: Spirituality; adjusted $R^2=0.288$; $F=28.66$; SD: Standard deviation

Multiple linear regression analysis was conducted to test the predictability of spirituality with perceived loneliness and depression in hemodialysis patients. As a result of the analysis, a significant regression model $R^2=0.254$. A one unit increase in loneliness causes a -0.28 fold decrease in spirituality. A one unit increase in depression causes a -0.318 fold decrease in spirituality. (Table 4).

DISCUSSION

This study was conducted to determine the effect of spirituality on loneliness and depression in hemodialysis patients. When the socio-demographic characteristics of the patients participating in the study were compared with the SIWB, UCLA and GDS scale score averages, in those living with their spouses and children, and a statistically significant difference was found (Table 1, $p<0.000$). Similarly, Alshraifeen et al. (2020) found that HD patients living with family members had higher levels of spiritual well-being. Musa et al. (2018) and Gerogianni et al. (2018) reported that the mean depression score of patients who were married or living with their families was low. Ganu et al. (2018) found that single patients had a higher rate of depression. The fact that most of the patients participating in this study (52.1%) lived with their spouses/children and families was a factor that reduced their loneliness and depression levels, and it also suggests that spouse/child support helps them cope and adapt to their illness more easily.

In this study, it was found that SIWB total mean score was high (42.73 ± 9.25), UCLA total mean score was (24.21 ± 5.48) and GDS total mean score was (9.17 ± 6.08) lower (Table 2). Similarly, Pilger et al. (2017) and Duran et al. (2020) found that HD patients had high levels of spiritual well-being. In the study of French et al. (2020) it was revealed that spirituality reduces depression and anxiety levels. Senmar et al. (2020) found that HD patients with high spiritual well-being had less depression and other psychological symptoms. However, Loureiro (2018), Alshraifeen et al. (2020) reported that the spiritual well-being levels of patients receiving HD treatment were at a medium level, while Musa (2018) reported a low level. This study is similar to literature.

In this study, it was found that the correlation analysis between the participants' SIWB total score average and UCLA was ($r=-0.627$, $p<0.000$) and GDS was ($r=-0.524$, $p<0.000$). A negative and statistically significant relationship was observed between the SIWB and the mean

UCLA and GDS scores of the individuals ($p<0.05$) (Table 3). Similarly, Fradelos et al. (2022) emphasized that there was a negative relationship between spirituality and depression and anxiety (Ganu et al., 2018). Alshraifeen et al. (2020) found that spirituality reduced anxiety, depression and loneliness levels and positively affected the health status of patients in their study with HD patients. Increasing the spiritual well-being levels of HD patients facilitates their adaptation to the disease and reduces the feeling of loneliness (Alradaydeh & Khalil, 2018; Fradelos et al., 2022; Musa et al., 2018; Loureiro et al., 2018). Other studies examining the relationship between anxiety and depression and spirituality in HD patients reported that the level of spiritual well-being was low. Darvishi et al. (2020) and Musa et al. (2018) stated in their studies that hemodialysis patients' awareness of the spiritual and religious aspects of their lives helps them to adapt to their illness. In their study, Alshraifeen et al. (2020) found that spiritual counseling provided to patients receiving HD treatment reduced the level of depression. Bogataj et al. (2022) found that spiritual care training reduced the level of depression in patients receiving HD treatment. Similar to literature, spirituality is thought to help patients overcome the disease and find meaning in their lives.

In this study, multiple linear regression analysis was conducted to test the predictability of spirituality with perceived loneliness and depression in hemodialysis patients (Table 4). Similarly, in a study conducted with hemodialysis patients in Iran, spirituality was found to be a positive determinant factor on the hope levels of patients with high spiritual well-being (De Campos et al., 2019). Senmar et al. (2020) reported that spiritual well-being is a factor that reduces depression, stress, and anxiety. Some studies have reported that HD patients receiving spiritual counseling are less affected by negative emotions such as anxiety, depression, and loneliness (Evangelos et al., 2022; Fanakidou et al., 2018). It was found that spiritual care reduced the level of death anxiety in patients receiving HD treatment. Turgay et al. (2017) found that prayer is an important determinant of improving quality of life. When the literature is

examined, it is stated that spirituality is a source of strength and support to help cope with the effects of psychosocial problems associated with diseases (Darvishi et al., 2020; Musa et al., 2018; Rambod et al., 2020). Some studies have emphasized that spirituality improves mental health, increases quality of life, and plays an important role in reducing depression and stress in patients (Darvishi et al., 2020; Musa et al., 2018). As a result of this study, in parallel with previous studies, it was determined that spiritual well-being reduces negative emotions such as depression and loneliness in hemodialysis patients.

CONCLUSION

This research suggests that spirituality plays an important role in the levels of loneliness and depression in patients receiving hemodialysis treatment. A positive significant relationship was found between patients' loneliness and depression levels. A significant negative relationship was found between spirituality, and loneliness and depression scores in patients. In these results, it is recommended that a spiritual care program be implemented for hemodialysis patients.

ETHICAL COMMITTEE APPROVAL

Before starting the study, written permission was obtained from the non-interventional research ethics committee of Kafkas University Faculty of Health Sciences (31st January 2022 and Number: 81829502.903/11).

AUTHOR CONTRIBUTION

Idea/concept: ZŞ; Design: ZŞ; Consultancy: ZŞ; Data Collection: ŞA; Data Processing: ŞA; Analysis and/or Interpretation: ŞA; Literature review: ZŞ, ŞA; Writing of the article: ZŞ, ŞA; Critical review: ZŞ, ŞA.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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This study has not been financed by any institutional organization.

PEER REVIEW

Externally peer-reviewed.

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