

Traditional, Complementary and Alternative Medicine Usage among Women Who Apply to Mammography Unit: A Descriptive Study

Mamografi Ünitesine Başvuran Kadınlarda Geleneksel, Tamamlayıcı ve Alternatif Tıp Kullanımı: Tanımlayıcı Bir Araştırma

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ABSTRACT Objective: The study aimed to determine the factors associated with the use of traditional, complementary and alternative medicine (TCAM) methods of women who applied to a mammography unit. **Material and Methods:** The descriptive study was carried out on 198 volunteer female patients. The data were obtained through a questionnaire form created by the researchers. Chi-square test was used in statistical analyses and p values lower than 0.05 were considered statistically significant. The required local ethics committee approval was obtained. **Results:** The mean age of the patients was 49.2±12.8 years, 29.3% applied for mammography screening and 70.7% applied for a control examination. The frequency of those who used any TCAM method was 47.5%. At the time of their initial diagnosis, 33% of the patients used TCAM during the treatment process. When comparing the sociodemographic features, reasons for admission, diagnosis times, and treatment methods of the used and non-used TCAM classes, no statistically significant differences were observed (p>0.05). And 60.0% of breast cancer patients who used TCAM and 81.3% of those with fibroadenoma or breast cysts did not share information with their physicians that they used TCAM. **Conclusion:** Regardless of socio-demographic characteristics or breast disease diagnosis, it was determined that approximately half of the women who applied to the mammography unit used a TCAM method at any time in their lives. Considering that some TCAM methods can lead to diagnosis and treatment delays, we think that physicians questioning the use of TCAM in their patients should become a routine part of the examination.

Keywords: Traditional and complementary medicine; alternative medicine; herbal medicine; breast cancer; breast mass

ÖZET Amaç: Çalışmada, mamografi ünitesine başvuran kadınların geleneksel, tamamlayıcı ve alternatif tıp (GETAT) yöntemi kullanma durumları ile ilişkili faktörlerin belirlenmesi amaçlanmıştır. **Gereç ve Yöntemler:** Tanımlayıcı tipteki çalışma, 198 gönüllü kadın hasta üzerinde yürütüldü. Veriler, araştırmacılar tarafından oluşturulan bir anket formu aracılığıyla elde edildi. İstatistiksel analizlerde ki-kare testi kullanıldı ve anlamlılık düzeyi p<0,05 olarak kabul edildi. Lokal etik komite onayı alındı. **Bulgular:** Hastaların yaş ortalaması 49,2±12,8 yıl olup, %29,3'ü mamografi taraması için %70,7'si ise kontrol muayenesi için başvurmuştu. Herhangi bir GETAT yöntemini kullananların sıklığı %47,5 idi. Hastaların %33'ü ilk tanı aldıkları dönemde GETAT kullanmıştı. GETAT kullanan ve kullananmayanlar karşılaştırıldıklarında sosyodemografik özellikleri, başvuru nedenleri, tanı süreleri ve tedavi yöntemleri açısından istatistiksel anlamlı farklılık olmadığı belirlendi (p>0,05). GETAT kullanan meme kanseri hastalarının %60,0'ı, fibroadenomu veya memede kisti olanların %81,3'ü GETAT kullandıkları bilgisini hekimleriyle paylaşmamıştı. **Sonuç:** Sosyodemografik özellikleri ya da meme hastalığı tanısından bağımsız olarak, mamografi ünitesine başvuran kadınların yaklaşık yarısının bir GETAT yöntemi kullandığı belirlendi. Bazı GETAT yöntemlerinin tanı ve tedavi gecikmelerine yol açabileceği dikkate alındığında, hekimlerin hastalarında GETAT kullanımını sorgulamasının muayenenin rutin bir parçası hâline gelmesi gerektiğini düşünüyoruz.

Anahtar Kelimeler: Geleneksel ve tamamlayıcı tıp; alternatif tıp; bitkisel tedavi; meme kanseri; memede kitle

The use of traditional, complementary and alternative medicine (TCAM) methods is increasing worldwide and this situation is of great importance from a medical, economic and social point of view. In

many countries, policymakers, health professionals and the public are dealing with issues related to the safety, effectiveness, quality, applicability and legal regulations of TCAM methods.^{1,2} However, there is

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still confusion in the definitions and no consensus has been reached. According to the World Health Organization, “traditional medicine” is defined as knowledge, skills and practices based on beliefs, theories and experiences specific to different cultures, which are used for the protection, maintenance or improvement of health.¹ “Complementary medicine” and “alternative medicine” are defined as various medical applications and products that are not part of traditional medicine and are not fully incorporated into the current health system. The history of traditional medicine dates back to Indian and Chinese civilizations, and it is known that herbal treatments were seen as part of medicine in ancient times. Complementary medicine methods, together with modern medicine, are used to improve the condition of the patient, without reducing its effect. The methods which applied instead of medical methods and the effect of has not been scientifically proven are defined as “alternative medicine”.^{2,3}

The type, application method and frequency of use of TCAM applications vary from country to country, even in different regions of the same country.⁴ While the use of TCAM is already widespread in some countries, it is seen that the frequency of use in other countries is increasing day by day.^{5,6} A survey of approximately 52,800 people in 32 different countries found that the frequency of use of any TCAM in the last 12 months was 26.4%, while in countries such as China and South Korea, the prevalence of use increased by up to 50%.⁷ A systematic review states that prevalence estimates vary widely between 15 countries, prevalence ranges from 9.8% to 76.0%, and is used more widely in East Asian countries.⁶

It is stated that they resort to TCAM methods in order to protect and improve the health of individuals, prevent the formation of diseases, to cure their existing diseases and to support the medical treatment they use or to reduce the side effects of drugs.^{8,9} It is stated that patients turn to alternative medicine methods because they think that patients do not improve with modern medical treatments, and that it is attractive to patients that these methods are natural.^{10,11} Although people with chronic diseases are more likely to use TCAM, it is seen that the probability increases even more in those with additional conditions.^{5,12} Cancers

are the leading diseases of TCAM use.^{13,14} However, it has been shown that wasted time with the use of TCAM can lead to delays in early diagnosis and treatment of cancer in particular.⁴

With the legal regulations made in Türkiye and the “Regulation on Traditional and Complementary Medicine Practices” published in 2014, methods such as leech treatment, mug therapy, etc., especially acupuncture, have gained legal dimension and can be done by certified physicians in ministry-authorized application centers and public hospitals. In addition, payments of some methods are covered by general health insurance.¹⁵ This situation suggests that the use of these methods will increase in recent years in our country. However, there is still not enough evidence to suggest the effects of these methods on treatment and protection, their interaction with general medical treatments.¹⁶

It can help all healthcare providers, especially physicians, to know which patient groups are using or willing to use TCAM method, to inform patients about possible negatives that may arise while in the diagnosis and treatment process, potentially to comply with therapeutic recommendations and improve the quality of health care. It is recommended that physicians cooperate with pharmacists, especially in the use of herbal medicines. Because during their 5-year undergraduate education, pharmacists are trained in the fields of pharmacy profession sciences (Pharmaceutical Botany, Pharmacognosy and Phytopharmacy-Phytotherapy) on subjects such as side effects of herbal medicines and drug interactions.¹⁷ Usually individuals seek health when they are sick. According to the contemporary public health philosophy, the main thing is that the individual maintains and improves his health before he or she becomes ill, while still healthy. One of the preventive health behaviors for individuals is participation in screening programs. The Ministry of Health in Türkiye recommends that women be screened for breast cancer every 2 years starting from the age of 40.¹⁸ In this study, it is aimed to determine the use of TCAM and related factors of women who apply to a mammography unit for diagnosis or treatment follow-up of breast diseases.

MATERIAL AND METHODS

STUDY DESIGN

The universe of the planned cross-sectional type study was created by patients who applied to the Breast Image Center of Ondokuz Mayıs University Medical Faculty Hospital. The number of people to be sampled was calculated in a package program (Version 16, Minitab, PA, USA), taking into account the data of a similar study.¹⁹ With the desired power of 0.8 and a significance level of 0.05, a sample size of 198 participants was generated for this study. After obtaining the necessary permissions for the study, it was carried out between 01 June and 31 July 2019 on patients who were willing to participate in the study. The study data were obtained through questionnaires completed by researchers using a face-to-face interview technique. In the questionnaire developed by the researchers, there were 6 questions for sociodemographic characteristics and 23 questions for TCAM methods. Considering the classification in a previous study, TCAM methods were classified as “herbal approach (dead nettle, black cumin, centaury, mistletoe, thyme herb, ginger, turmeric e.t.c.)”, “biological approach (shark cartilage, turtle blood, rabbit blood e.t.c.)”, “nutritional approach (Anzer honey, chestnut honey, black mulberry molasses, carob molasses, pomegranate, garlic e.t.c.)”, “cognitive-behavioral therapies (hypnosis, yoga, pilates, meditation, cup puller, acupuncture, exercise, reiki, body massage, bioenergy e.t.c.)” and “religious practices (pray, prayer, amulet, charm, vow e.t.c.)”.²⁰ In addition, “leech therapy” and “hacammat” methods were added to the survey because they are widely used in the literature in our country.¹⁰

STATISTICAL ANALYSIS

The data obtained from the surveys were transferred to the SPSS 22.0 (IBM Corporation, Armonk, NY, USA) package program and evaluated. Descriptive statistics for continuous variables were expressed as the mean, standard deviation, and the minimum and maximum values. Categorical variables were described as number (n) and percentage (%). Chi-square test of categorical data between groups was used in comparisons. Statistical significance level was accepted as $p < 0.05$ in all tests.

ETHICAL CLEARANCE AND INFORMED CONSENT

Ethical approval for the study (Ondokuz Mayıs University Clinical Research Ethics Committee; date: May 10, 2019 no: 2019/386) and the necessary permissions were obtained from the clinical director where the study was carried out. The study design and implementations were carried out in accordance with the ethical standards set forth in the 1964 Helsinki Declaration and subsequent amendments. Consent was obtained from the patients prior to the study.

RESULTS

The study included 198 participants who applied to the mammography unit. All of the participants were women, 86% of women with an average age of 49.2 ± 12.8 years were married, 62% were housewives and 24% were working in an income-generating job. 41% of the women were elementary school graduates and 23.7% were high school graduates. According to their own statements, 44.9% had less household income and 58.6% lived in the city center.

When the distribution of the patients according to the reasons for admission is examined; it was determined that 58 (29.3%) of them applied for breast screening program and 26 (46.2%) of these patients applied because of their own complaints and/or a history of cancer in their relatives. Of 140 (70.7%) patients who were diagnosed with a breast mass and applied for control, 32.1% had breast cancer, 28.5% had a cyst in the breast, and 18.5% had a fibroadenoma. 28.3% (56 patients) of the participants stated that they received any medical treatment due to mass diagnosis in the breast, 19.2% stated that this disease was treated with chemotherapy, 15.7% radiotherapy, 25.8% surgical treatment and 16.2% hormone therapy (Some patients were given multiple treatment options).

Ninety-four (47.5%) participants in the study reported using any TCAM method at any time in their lives. The methods used by the participants and the distribution of the associated properties were presented in [Table 1](#). The most commonly used TCAM method was herbal (89.4%) and nutritional (83.0%) approaches, respectively.

TABLE 1: Methods used by TCAM users and distribution of related features (n=94).*

Variables		n (%)
Used TCAM method	Herbal approach	84 (89.4)
	Nutritional approach	78 (83.0)
	Cognitive-behavioral therapies**	24 (25.5)
	Religious practices	55 (58.5)
	Biological approach***	1 (1.1)
Reasons for using TCAM	To fight the disease directly	25 (26.6)
	To increase the body's ability to fight the disease	58 (61.7)
	Improving the physical appearance	18 (19.1)
	To feel better emotionally	32 (34.0)
	To fight the adverse effects of the treatment	6 (6.4)
	To reduce of symptom of the disease	19 (20.2)
	To do everything for the disease	15 (7.6)
Time for using TCAM	When there is no disease	36 (38.3)
	Moment of the first diagnosis	31 (33.0)
	While taking treatment	16 (17.0)
	After treatment	11 (11.7)
Cost of the TCAM method	Cheaper than medical treatment	48 (51.1)
	More expensive than medical treatment	2 (2.1)
	Almost the same expense	4 (4.3)
	There is no cost	39 (41.5)
	I don't know	1 (1.1)
Source of information on TCAM	Family members, friends	51 (54.3)
	The different types of media (print media, internet, radio/TV)	45 (47.9)
	Medical professional	11 (5.6)
	From a patient	14 (14.9)
Total		94 (100.0)*

*More than one option has been marked in some categories; **This category includes exercise, acupuncture, and hacamat. The religious approach is handled as a separate title in the table; ***Shark cartilage; TCAM: Traditional, complementary and alternative medicine.

In addition, it was determined that 22 (23.4%) patients exercised and 3 (3.1%) patients had acupuncture and 2 (2.1%) patients had hacamat. While 12.8% of the patients used a single method, 28.7% used 2 methods, 46.8% used 3 and 11.7% used four different methods. The participants were asked about the time of use of TCAM methods, and according to the answers, 38.3% of them did not have any disease, while 33.0% of them stated that they used a TCAM method during the first diagnosis, 17% of them during the treatment process. The proportion of those who are stating a single reason was 48%, while those who used TCAM for two or more reasons were 52%. It was determined that 28.7% of those who used TCAM received medical treatment due to their breast-related diagnosis,

73.4% of total TCAM patients, 60.0% of those with breast cancer, 81.3% of those with fibroadenome or breast cysts did not share their knowledge with their physicians that they used TCAM.

In the study, it was determined that there was no statistically significant difference in sociodemographic characteristics, reasons for application, diagnosis times and treatment methods when compared with those who used and did not use TCAM (p>0.05) (Table 2).

DISCUSSION

In our study, it was determined that nearly half of the women who applied to the mammography unit for

TABLE 2: Comparison of some features of the participants according to their use of TCAM (n=198).

Variables		Total*	Using TCAM**		p value
			Yes	No	
Age group (years)	18-25	11 (5.6)	5 (45.5)	6 (54.5)	0.54
	26-45	64 (32.3)	35 (54.7)	29 (45.3)	
	46-65	103 (52.0)	46 (44.7)	57 (55.3)	
	>65	20 (10.1)	8 (40.0)	12 (60.0)	
Education	No formal education	16 (8.1)	5 (31.3)	11 (68.8)	0.35
	Primary school	96 (48.5)	47 (49.0)	49 (51.0)	
	High school	30 (15.2)	12 (40.0)	18 (60.0)	
	University	56 (28.3)	30 (53.6)	26 (46.4)	
Education	No formal education+primary school	97 (49.0)	53 (54.6)	44 (45.4)	0.55
	Secondary school+high school	45 (22.7)	25 (55.6)	20 (44.4)	
	University	56 (28.3)	26 (46.4)	30 (53.6)	
Marital status	Married	170 (85.9)	79 (46.5)	91 (53.5)	0.48
	Single	28 (14.1)	15 (53.6)	13 (46.4)	
Working status	Housewife	123 (62.1)	56 (45.5)	67 (54.5)	0.76
	Working	48 (24.2)	26 (54.2)	22 (45.8)	
	Retired	18 (9.1)	8 (44.4)	10 (55.6)	
	Student	9 (4.5)	4 (44.4)	5 (55.6)	
Location	City	116 (58.6)	56 (48.3)	60 (51.7)	0.33
	Town	68 (34.3)	34 (50.0)	34 (50.0)	
	Village	14 (7.1)	4 (28.6)	10 (71.4)	
Household income	Income more than expense	23 (11.6)	12 (52.2)	11 (47.8)	0.32
	Income equal to expenses	86 (43.4)	45 (52.3)	41 (47.7)	
	Income less than the expense	89 (44.9)	37 (41.6)	52 (58.4)	
Reason for application	Breast screening program	58 (29.3)	28 (48.3)	30 (51.7)	0.53
	Fibroadenoma	26 (13.1)	16 (61.5)	10 (38.5)	
	Breast cysts	40 (20.2)	16 (40.0)	24 (60.0)	
	Breast cancer	45 (22.7)	20 (44.4)	25 (55.6)	
	Benign breast mass	29 (14.6)	14 (48.3)	15 (51.7)	
Reason for screening (n=58)	Routine screening	32 (55.2)	16 (50.0)	16 (50.0)	0.77
	Complaints and/or a history of cancer in their relatives	26 (44.8)	12 (46.2)	14 (53.8)	
Diagnosis times (year)***		5.4±5.6	5.3±6.1	5.6±5.3	0.28
Treatment status Received any treatment***	Yes	84 (60.0)	39 (46.4)	45 (53.6)	0.83
	No	56 (40.0)	27 (48.2)	29 (51.8)	
Chemotherapy***	Yes	38 (27.1)	17 (44.7)	21 (55.3)	0.72
	No	102 (72.9)	49 (48.0)	53 (52.0)	
Radiotherapy***	Yes	31 (22.1)	12 (38.7)	19 (61.3)	0.29
	No	109 (77.9)	54 (49.5)	55 (50.5)	
Hormone therapy***	Yes	32 (22.9)	14 (43.8)	18 (56.3)	0.66
	No	108 (77.1)	52 (48.1)	56 (51.9)	
Surgical treatment***	Yes	51 (36.4)	23 (45.1)	28 (54.9)	0.71
	No	89 (63.6)	43 (48.3)	46 (51.7)	
Total		198 (100.0)	94 (47.5)	104 (52.5)	

*Percentage of column; **Percentage of rows; ***Except for patients coming for screening; TCAM: Traditional, complementary and alternative medicine.

screening or control examination used TCAM method at some point in their lives and the most commonly used methods were herbal and nutritional approaches.

The frequency of TCAM use varies according to regions and countries in hospital or community-based studies. Approximately one in two people used TCAM in our study and it was accepted that TCAM was widely used in our working group. The frequency of TCAM use in various diseases and healthy individuals varies widely in Türkiye and has been reported to be between 12.6% and 65.8%.^{8,10,13,14} In a meta-analysis, it was stated that Türkiye (48%) had the highest prevalence among European countries.⁵ A study conducted in the normal population in Europe has shown that in the last year, it has been between 9.5% and 39.5% more frequent than in countries.²¹ In India, the frequency of use was reported as 36.7% and lifetime use was 57.2% in the last year.²² While the systematic review of studies in cancer patients stated that their rates ranged from 9% to 88%, it was reported that the frequency of use in the period after breast cancer treatment in the United States was 94%.^{5,23} These changing frequencies may depend on the health profile of individuals, the cultural difference of societies, as well as the difference in data collection methods. In a meta-analysis, it is stated that higher TCAM prevalence rates are defined in studies where individuals are presented with a list of all TCAM products to choose from.⁵ For example, a study in Austria reported 57.6% use of TCAM in the last year, along with relaxing applications such as prayer, painting, and music.²⁴ In one study in Brazil, the frequency of the use of at least one TCAM method was found to be 4.1% in the last year, and only four options (acupuncture, homeopathy, phytotherapy and other) were presented as TCAM methods in the questions of the related study.²⁵ The fact that the “Complementary and Alternative Medicine Approaches Scale” list of various types of TCAM was used in our study may have contributed to the high prevalence rate by affecting the results.²⁰

Systematic studies in the literature emphasize that female sex and breast cancer diagnosis are highly associated with TCAM use.^{5,10,26} It is also shown to be used more frequently in older people, those with high

educational and income levels, and those diagnosed with a chronic disease.^{7,23,27,28} Although there is no statistical significance in our study, it was determined that female patients with different diagnoses used TCAM with a frequency ranging from 61.5% to 40.0%. However, higher frequency (61.5%) was found to be notable in those with fibroadenoma. Fibroadenoma is one of the most common solid masses in the breast, and although the risk of cancer of most simple fibroadenoma is not very rare (0.5%), it is reported that there is an increased risk of breast cancer in those with a family history positive.²⁹ In addition, it is seen that half of the patients who come for routine screening without any complaint/relatives history of cancer used TCAM methods. In our study, the reasons for use of TCAM were most commonly stated as “increasing the resistance of the body” (61.7%), “providing psychological relief” (34.0%) and “direct war on disease” (26.6%). Therefore, the vast majority of patients probably resort to such methods with fear and concerns, such as contracting a disease that can have bad consequences, especially cancer, or the progression of the disease. A study of women with breast cancer has shown that TCAM use is more frequent in married, highly educated, city-dyed, retired and housewife late adult.¹⁹ In our study, it was determined that there was no significant difference in socio-demographic characteristics. This may have been due to a lack of cancer diagnosis in our study population. Similarly, studies carried out in general populations show that characteristics such as education, place of residence and income level are not related to the use of TCAM.^{10,22,30} Nevertheless, it should be kept in mind that individuals with higher socioeconomic status and level of education are more likely to find many different TCAM methods and have a higher tendency to search and experience these methods.^{21,23} On the other hand, there may still be a broad reliance on traditional healers, even in rural or semi-urban areas where access to medical services is inadequate, or in individuals with low economic levels, even in severe diseases.^{4,6}

The diversity of the preconditions used may be related to the sociocultural characteristics of individuals, their economic opportunities, their commitment to traditions and beliefs. It was determined that herbal

and nutritional products were used more frequently in our habitation, which was compatible with the literature.^{10,12,13,19,30} We think that herbal and nutritional methods are used more often because they are easier and cheaper to reach than other methods, are widely recommended, and additional applications or practitioners are often not needed. In societies where herbal remedies or cognitive-behavioral therapies (including prayer) are widely used, the perception that these methods are cheaper or even cost-effective than medical treatments is in line with the finding in our study.⁴ Although patients think TCAM methods are more cost-effective than modern medical treatments, a study in India has shown that the costs of these treatments are not significantly different from modern medicines.²² It is stated that the top three most commonly used methods in European countries in the last year are massage therapy, homeopathy and osteopathy, and these methods are covered by health insurance. As an example of traditional approaches, homeopathy has historically first appeared in Germany and is widely used in Germany and other German-speaking countries.²¹ In China and other East Asian countries, applications such as herbal remedies, motion therapies (Qi Gong or Tai Qi) or acupuncture specific to traditions and culture are more common.²⁸ Although it cannot be demonstrated in our study, it is stated that the prevalence of leech treatment and hacamat in Türkiye is higher than in other countries, this may be related to religious and cultural beliefs, and its use will increase even more with the inclusion of the “Health Practice Communiqué”.¹⁰

A study conducted in İzmir stated that 80% of women with breast cancer who received chemotherapy, radiotherapy and/or hormone therapy used a TCAM method.¹⁹ This rate is higher than the frequency of use of TCAM (46.4%) during the medical treatment process in our study. Due to the variety of TCAM methods used, there is still not enough information about their interaction with standard medical treatments. Moreover, the fact that individuals have multiple chronic diseases and use multiple applications simultaneously makes these interactions even more difficult to determine.¹⁶ In a statement, the Turkish Society of Medical Oncology said: warning that simultaneous use of chemotherapy with phy-

totherapy may lead to drug interaction, reduce the effectiveness of chemotherapy or increase its side effect, and recommend that phytotherapy not be used during chemotherapy.³¹

Given the high prevalence of TCAM use, it seems imperative that physicians and other health workers question the use of TCAM in their patients during routine patient visits. However, in many national and international studies, it has been observed that the majority of patients and/or their relatives do not inform medical personnel that they are using these methods.^{10,12,13,24} In our study, the proportion of those who did not inform the doctor was interpreted as high in all diagnostic groups. In different studies, it is emphasized that the notifications about TCAM are very inadequate due to insufficient patient-physician communication, physicians not asking their patients about this issue, patients are not aware of the possible harms of the application, do not think it has any significance, forgetfulness or fear of the reaction of the physicians of the patients.^{10,24} For example, in Iran, it has been stated that patients probably do not need to report to health workers because herbal medicines are part of the traditional way of life of society.¹²

CONCLUSION

In this study, it was determined that the use of TCAM by women who applied to the mammography unit was widespread and that the use of TCAM was independent of any socio-demographic characteristics or clinical diagnosis. Considering the prevalence of use, it should be ensured that all health professionals, especially physicians, have increased knowledge and awareness about the diversity of TCAM methods, their side effects, and their interaction with modern medical treatment methods. In this context, it is recommended that the curriculum on TCAM methods be integrated into the training program of relevant health professionals. After graduation, in-service trainings should continue to increase the awareness and knowledge levels of health workers. Physicians' questioning of TCAM use when receiving anamnesis should be made a routine part of the examination. In this way, it will be possible to reduce the unnecessary time and economic costs spent by patients for

treatment or prevention by ensuring that the patients get the information they need from the right sources.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the

potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Özlem Terzi, Şeyma Genç, Şule Özdemir; **Design:** Özlem Terzi, Şeyma Genç, Hatice Nilden Arslan, Şule Özdemir; **Control/Supervision:** Özlem Terzi; **Data Collection and/or Processing:** Şeyma Genç, Şule Özdemir; **Analysis and/or Interpretation:** Şeyma Genç, Şule Özdemir; **Literature Review:** Özlem Terzi, Şeyma Genç, Şule Özdemir, Hatice Nilden Arslan; **Writing the Article:** Özlem Terzi, Şeyma Genç, Şule Özdemir, Hatice Nilden Arslan; **Critical Review:** Özlem Terzi; **References and Findings:** Özlem Terzi, Şeyma Genç, Hatice Nilden Arslan, Şule Özdemir.

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