

Determining the Practices and Attitudes of Nurses Working in Intensive Care Units Towards Complementary and Alternative Treatment Methods

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ABSTRACT

Objective: This study was conducted to examine intensive care nurses' attitudes about complementary and alternative treatment methods and the treatment methods they applied.

Materials and Methods: This research was carried out with 252 nurses working in the intensive care unit of a city hospital. Data were collected via questionnaires between February and June 2022, using the "Nurse Introductory Information Form" and "Integrative Complementary and Alternative Treatment Attitude Scale" (ITATTS).

Results: The mean age of the nurses was 25.48±1.99, and 79.8% of them were women. 77% of the nurses stated that they used Complementary and Alternative Therapy (CAM) methods. They preferred massage with 66.7% as the method they knew the most, massage with 45.2% as the method they used, and massage with 42.9% as the method they wanted to apply. The total mean score of the nurses in ITATTS was 25.53±5.97, 16.71±4.13 for the CAM sub-dimension, 8.82±3.441 for the Holistic Health sub-dimension, and the alpha value of the scale was 0.66. The total mean score from the CAM confidence scale is 6.40±1.76.

Conclusion: The study determined that the attitudes and behaviors of intensive care nurses regarding CAM methods and practices were inadequate and that they needed to raise more awareness on the subject. The group with the highest attitude of intensive care nurses toward CAM was those whose graduation year was between 2010-2016, and the group with the lowest was those with chronic diseases.

Keywords: Complementary and alternative therapy, Intensive care nurse, attitude

INTRODUCTION

According to the records of the World Health Organization (WHO), modern medicine is "used to prevent, diagnose, cure or treat physical and mental diseases, as well as to maintain good health, based on theories, beliefs, and experiences specific to different cultures, explainable or unexplainable" (1). After falling ill, people look for solutions to treat their illness and to maintain the well-being of their general condition. As a solution, they prefer modern medicine or treatment that includes Complementary and Alternative Medicine (CAM) or both. It has recently been seen that individuals who are sick tend to use CAM applications more than in previous times to

treat their diseases, and healthy individuals to protect their health and improve their well-being (2).

CAM usage rates are increasing in other countries, including Turkey, compared to previous years (3). There are certain attitudes that influence and are used to understand the use of complementary and alternative therapy. These include whether people's lifestyle is in harmony with CAM and they are not satisfied with modern medicine, whether the drugs taken in the treatment of the disease have side effects, and whether communication with the treating physician is limited and communication is poor. These attitudes caused the individual to use CAM (2). In Turkey, the "Acupuncture Treatment

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Regulation” was issued in 1991, which was accepted as the first regulation on CAM. This regulation was revised in 2002. The Ministry of Health issued a regulation to eliminate the uncertainties experienced in Complementary and Alternative Treatment practices, stating that the application process should be carried out by experts without indications (3).

Intensive care clinics in hospitals are highly stressful areas due to the complexity of advanced technology devices and unexpected changes in the current health status of patients. For this reason, stressful working environments are risky for nurses working in intensive care, both physiologically and psychologically. Nurses who spend longer time with patients are more frequently and quickly affected by adverse conditions. Intensive care nurses face many problems such as intense working conditions, fatigue caused by insomnia, unclear duties, authorities and responsibilities, and being in the care

of patients who are suffering and dying. In addition, intensive care affects the nurse’s job satisfaction and burnout level (4).

In studies conducted in our country, it has been stated that nurses do not have sufficient knowledge about their field (4). This study was carried out to evaluate the use of CAM applications by intensive care nurses and their attitudes and behaviors towards CAM applications, since the studies in the literature are few and the subject is not known enough.

MATERIALS AND METHODS

This study is a cross-sectional descriptive study aiming to examine the attitudes of intensive care nurses about complementary and alternative treatment methods and the treatment methods they apply. The study was conducted between February - June 2022 with nurses working in intensive care units in a city hospital in Istanbul.

Table 1: Distribution of Nurses’ Socio-Demographical Characteristics

		n	%
Gender	Female	201	79.8
	Male	51	20.2
Age	21-26	185	73.4
	27+	67	26.6
Marital status	Min:21 Max: 43 25.48±1.99		
	Married	52	20.6
Year graduated	Single	200	79.4
	2010 -2016	23	9.1
Educational status	2017+	229	90.9
	Undergraduate	236	93.7
Working time as a nurse	Postgraduate	16	6.3
	2 years and below	147	58.3
	3 - 5 years	45	17.9
	Over 5 years	60	23.8
Uptime on the unit	1 years and below	84	33.3
	1 - 2 years	84	33.3
Smoking status	Over 2 years	84	33.3
	Yes	85	33.7
	No	157	62.3
Alcohol use status	I quit	10	4.0
	Yes	50	19.8
Regular exercise status	No	193	76.6
	I quit	9	3.6
Chronic disease	Once a week	41	16.3
	2-3 times a week	27	10.7
	I don't	184	73.0
	Have	20	7.9
	None	232	92.1

Table 2: Mean Scores and Alpha Values of the Integrative Complementary and Alternative Treatment Attitude Scale and its Sub-Dimensions (N=252)

	Min	Max.	Mean ± SD
Total	12.00	48.00	25.53±5.97
Complementary and Alternative Medicine Sub-Dimension	7.00	31.00	16.71±4.13
Holistic Health Sub-Dimension	5.00	30.00	8.82±3.44
CAM Confidence Scale	1	10	6.40±1.76

Table 3: Complementary and Alternative Treatment Methods Known and Used by Nurses for Himself or Family

CAM methods that the person uses for themselves or their family	n		%	
	194		77.0	
	Methods They Know		The Methods They Applied	
	n	%	n	%
Massage	168	66.7	114	45.2
Cup Treatment	149	59.1	70	27.8
Prayer	148	58.7	110	43.7
Herbal teas	136	54	88	34.9
Painting Music Art	116	46	50	19.8
Meditation	98	38.9	33	13.1
Hydrotherapy Spa	95	37.7	45	17.9
Acupuncture	94	37.3	8	3.2
Yoga	93	36.9	21	8.3
Vitamins	86	34.1	50	19.8
Aromatherapy	79	31.3	25	9.9
Ozone Therapy	79	31.3	21	8.3
Plants	74	29.4	43	17.1
Hypnosis	71	28.2	1	0.4
Reflexology	57	22.6	18	7.1
Bioenergy	36	14.3	8	3.2
Acupressure	30	11.9	5	2
Reiki	30	11.9	4	1.6
Therapeutic Touch	29	11.5	4	1.6
Treatment with Colors	27	10.7	9	3.6
Special Diets	18	7.1	5	2
Feng Shui	16	6.3	0	0
Osteopathy	13	5.2	3	1.2
TaiChi	12	4.8	0	0
Homeopathy	9	3.6	1	0.4
Ayurveda	6	2.4	1	0.4
I have no idea	6	2.4	5	2
Chiropractic	5	2	0	0
Shark Cartilage	2	0.8	0	0

* Participants marked more than one option.

Research Questions;

1. What are the CAM methods used by nurses working in intensive care?
2. What are the CAM usage status, attitudes, and behaviors of nurses working in intensive care?

Population and Sample of the Research

The scope of the research was determined as the nurses working in the intensive care units of a city hospital in Istanbul

(n=335). Since there was no study that could be referenced in the study, the effect size standardized by Cohen was used. For the effect size F test of the study, the minimum total number of samples was determined as 252 by taking 0.05 alpha value, 0.25 effect size, and 95% theoretical power. When T and F tests were evaluated together, it was decided that a minimum of 252 people should be included.

The criteria for inclusion in the research were:

- Being 18 years or older;
- Working in intensive care;
- Being able to communicate verbally; and
- Volunteering to participate in the research.

Research Variables

Dependent Variables: Integrative Complementary and Alternative Treatment Attitude Scale total and subscale mean scores

Independent Variables: Socio-demographic characteristics of intensive care nurses, lifestyles, health status, methods used in case of illness, known and applied CAM methods

Data Collection Tools of the Research

The data of the study were collected by using the “ Nurse Introductory Information Form “ and the “Integrative Complementary and Alternative Treatment Attitude Scale” (ITATTS).

Nurse Introductory Information Form

The form was prepared by scanning the literature and includes the socio-demographic status of the intensive care nurses included in the study and the independent variables that will affect their attitudes towards CAM (2, 5). The form consists of 23 questions in total that ask about gender, age, years spent as a nurse, marital status, years spent in the intensive care unit, having a chronic disease, alcohol and smoking status, etc. In addition, the CAM confidence scale question in the Introductory Information Form was scored between 0-10 points and it was normally distributed.

Integrative Complementary and Alternative Treatment Attitude Scale (ITATTS)

The Turkish validity and reliability of the scale performed by Hyland et al. was done by Erci in 2003. The scale, which aims to measure people’s attitudes towards CAM, is a 6-point Likert type consisting of 11 items: strongly agree=1, strongly disagree=6, with two sub-dimensions. The holistic health sub-dimension (items 1, 3, 5, 7, and 10) measures the patient’s perception of individuality in self-care. The complementary alternative medicine sub-dimension (items 2, 4, 6, 8, 9, and 11) measures the patient’s use of CAM. Items 2, 4, 6, and 9 in the scale are evaluated by reversing them. The highest score to be obtained from the scale is 66, the lowest score is 11, and a low score indicates a positive attitude, while a high score indicates a negative attitude. While the Cronbach’s Alpha value was found to be 0.72 in Erci’s study, it was found to be 0.66 in this study.

Data Analysis

The data obtained in the research were analyzed using the SPSS (Statistical Package for Social Sciences) for Windows 25.0 program. Descriptive statistical methods (number, percentage, mean, standard deviation) were used while evaluating the data. In addition to the tests of whether the data is normally distributed or not, with a histogram, Q-Q graph, and box-plot graphics, as well as skewness and kurtosis, the data can be evaluated with dispersion measures such as the coefficient of variation. In order to ensure normality, the values should be observed close to the 45-degree line in the scatter diagram of the data and should be positioned by centering the median line of the box in the box line graph. The normal distribution was checked with conformity tests of normality and kurtosis skewness values.

Ethical Permission

In order to conduct the research, the necessary permissions were obtained from the Ethics Committee of Istanbul Sabahattin Zaim University, Document Date and Number: 27.05.2021-E.7153, and from the Provincial Health Directorate, numbered E-15916306-604.01.02, dated 25.02.2022. The nurses in the study were informed about the purpose of the study and their consent was obtained by explaining that participation was voluntary and that the confidentiality of their personal information would be protected. In addition, permission was received via e-mail from Behice Erci for the scale to be used in the study.

RESULTS

When the data on the socio-demographic characteristics of the nurses were examined, it was calculated that 79.8% were women, 73.4% were between the ages of 21-26 and the average age of the participants was 25.48 ± 1.99 . 79.4% of the participants were single, 90.9% had graduated before 2017 and 93.7% were undergraduate graduates. An examination of the distribution of information regarding their professional experience showed that 58.3% of them had 2 years or less than and 33.3% of them had more than 3 years of professional experience. 62.3% of the participants stated that they did not smoke and 76.6% did not use alcohol. 73% of them stated that they did not do sports regularly and only 7.9% of them had a chronic disease (Table 1).

According to the results of the total and sub-dimensions taken from the nurses’ ITATTS, the mean total score taken from the scale was 25.53 ± 5.97 . The mean score for the complementary and alternative medicine sub-dimension of the scale was 16.71 ± 4.13 , the mean score for the holistic health sub-dimension was 8.82 ± 3.44 , and the mean CAM confidence scale score was found to be 6.40 ± 1.76 (Table 2).

The CAM methods known to the participants were: massage (66.7%), cupping therapy (59.1%), prayer (58.7%), herbal teas (54%), painting music and art (46%), meditation (38.9%), hydrotherapy spa (37.7%), acupuncture (37.3%), yoga (36.9%),

Table 4: Comparison of Nurses' Introductory Information and Mean Measurements of Complementary and Alternative Treatment Attitude Scale and its Sub-Dimensions

		Attitude Scale Towards Holistic Complementary and Alternative Medicine		
		Total	Complementary and Alternative Medicine Sub-Dimension	Holistic Health Sub- Dimension
		Mean±SD	Mean±SD	Mean±SD
Gender	Female	25.12±5.81	16.41±4.05	8.71±3.18
	Male	27.14±6.36	17.88±4.26	9.25±4.32
t test		-2.166	-2.289	-0.566
p value		0.031*	0.023*	0.571
Age	21-26	26.16±6.1	17.06±4.19	9.1±3.64
	27 years and older	23.79±5.26	15.73±3.8	8.06±2.67
t test		2.824	2.284	-2.113
p value		0.005*	0.023*	0.035*
Marital status	Married	23.13±5.26	15.58±3.97	7.56±2.22
	Single	26.16±6	17.01±4.13	9.15±3.62
t test		-3.314	-2.240	-3.229
p value		0.001*	0.026*	0.001*
Year graduated	2010-2016	21.65±4.45	14.52±3.80	7.13±1.55 / 7.00
	2017 and over	25.92±5.97	16.93±4.10	8.99±3.53 / 8.00
t test		3.334	-2.700	-4.675
p value		0.000*	0.000*	0.013*
Educational status	Undergraduate	25.71±5.94	16.82±4.13	8.89±3.46
	Postgraduate	22.94±5.93	15.13±3.86	7.81±2.95
U test		1.804	1.592	-1.442
p value		0.072	0.113	0.149
Working time as a nurse	2 years and below	26.2±5.76	17.08±4.08	9.12±3.41
	3 - 5 years	25.98±7.1	16.93±4.58	9.04±4.35
	Over 5 years	23.55±5.18	15.63±3.76	7.92±2.51
t test		4.484	2.739	5.827
p value		0.012*	0.067	0.054
		1>3		
Uptime on the unit	1 years and below	26.33±6.13	17.32±4.18	9.01±3.63
	1 - 2 years	25.23±5.7	16.08±3.72	9.14±3.78
	Over 2 years	25.04±6.06	16.73±4.41	8.31±2.82
H test		1.159	1.903	2.306
p value		0.316	0.151	0.316
Smoking status	Yes	25.31±6.64	16.31±4.37	9.0±4.09
	No + I quit	25.65±5.61	16.92±4	8.73±3.06
U test		-0.428	-1.110	-0.023
p value		0.669	0.268	0.982
Alcohol use status	Yes	26.52±6.24	17.44±4.02	9.08±4.39
	No + I quit	25.29±5.89	16.53±4.14	8.76±3.17
U test		1.309	1.399	-0.124
p value		0.192	0.163	0.901
Regular exercise status	Once a week	25.32±6.72	16.39±4.24	8.93±4.59
	2-3 times a week	27.33±6.04	17.56±3.98	9.78±3.84
	I don't	25.32±5.77	16.66±4.13	8.66±3.06
H test		1.381	0.702	3.325
p value		0.253	0.496	0.190
Chronic disease	There is	22.95±5.8	14.8±4.5	8.15±2.78
	None	25.75±5.94	16.88±4.06	8.88±3.49
t test		-0.028	-2.173	-0.871
p value		0.044*	0.031*	0.384

*p<0.05 U: Mann Whitney U test H: Kruskal Wallis-H Testi t: Independent t-test Post-hoc test (Bonferroni correction)

Table 5: Comparison of Nurses' Level of Confidence in Complementary and Alternative Treatment According to Socio-Demographical Characteristics

		CAM Confidence Scale
Gender		Mean ± SD
	Female	6.46±1.69
	Male	6.16±1.99
U test		1.091
p value		0.276
Age	21-26	6.32±1.79
	27 years and older	6.6±1.68
U test		-1.088
p value		0.378
Marital status	Married	6.9±1.55
	Single	6.27±1.79
t test		2.355
p value		0.019*
Year graduated	2010-2016	6.87±1.66
	2017 and over	6.35±1.77
U test		1.355
p value		0.177
Educational status	Undergraduate	6.32±1.73
	Postgraduate	7.5±1.86
t test		-2.623
p value		0.009*
Working time as a nurse	2 years and below	6.31±1.85
	3 - 5 years	6.47±1.5
	Over 5 years	6.57±1.72
H test		0.509
p value		0.602
Uptime on the unit	1 years and below	6.19±1.91
	1 - 2 years	6.42±1.58
	Over 2 years	6.58±1.77
H test		1.056
p value		0.349
Smoking status	Yes	6.13±1.77
	No + I quit	6.53±1.74
U test		-1.729
p value		0.085
Alcohol use status	Yes	6.16±1.56
	No + I quit	6.46±1.8
U test		-1.064
p value		0.288
Regular exercise status	Once a week	6.73±1.86
	2-3 times a week	6.3±1.73
	I don't	6.34±1.74
H test		0.893
p value		0.411
Chronic disease	Have	6.55±2.48
	None	6.38±1.69
U test		0.405
p value		0.686

*p<0.05 U: Mann Whitney U test H: Kruskal Wallis-H Testi t: Independent t-test Post-hoc test (Bonferroni correction)

vitamins (34.1%), ozone therapy (31.3%), aromatherapy (31.3%), herbs (29.4%), hypnosis (28.2%), reflexology (22.6%), bioenergy (14.3%), acupressure (11.9%), reiki (11.9%), therapeutic touch

(11.5%), color therapy (10.7%), special diets (7.1%), feng shui (6.3%), tai-chi (5%, 4.8%), homeopathy (3.6%), ayurveda (2.4%), chiropractic (2%) and shark cartilage (0.8%). 2.4% stated that

Table 6: The Effect of Complementary and Alternative Treatment Confidence Level on Attitudes towards Holistic Complementary and Alternative Medicine

	Unstandardized coefficients		t	p value	F	p value	R2	DW
	Beta	Std. Error						
Fixed	34.754	1.289	26.953	0.000				
Assurance	-1.442	0.194	-7.416	0.000	55.004	0.000	0.177	1.520

they had no knowledge. The CAM methods previously applied by the participants were: massage (45.2%), cupping cup treatment (27.8%), prayer (43.7%), herbal teas (34.9%), painting music and art (19.8%), meditation (13.1%), hydrotherapy spa (17%). acupuncture (3.2%), yoga (8.3%), vitamins (19.8%), ozone therapy (8.3%), aromatherapy (9.9%), herbs (17.1%), hypnosis (0.4%), reflexology (7%), bioenergy (3.2%), acupressure (2%), reiki (1.6%), therapeutic touch (1.6%), color therapy (3.6%), special diets (2%), osteopathy (1.2%), homeopathy seems to apply (0.4%), ayurveda (0.4%) (Table 3).

It was determined that the nurses' attitudes towards CAM were positive. It was found that among the intensive care nurses, women aged 27 and older, who were married, had graduated between 2010 and 2016, had been working as nurses for 5 years or more, and those with chronic diseases had positive attitudes towards CAM. It was observed that the scores obtained from the scale and its sub-dimensions did not show a statistically significant difference according to the individual's education, working time in the unit, smoking, alcohol use and exercise habits. In other words, it was determined that they did not have an attitude towards CAM (Table 4).

It was determined that the level of confidence in CAM showed a statistically significant difference according to the marital and educational status of the participant. It was determined that individuals who were married had a higher level of trust, and individuals who had a master's degree had higher levels of trust.

It was determined that there was no statistically significant difference in the level of confidence in CAM according to the participants' gender, age, graduation year, working time, working time in the unit, smoking, alcohol use, exercise habits, and chronic disease (Table 5).

The effect of the level of confidence in CAM on Attitudes towards Holistic Complementary and Alternative Medicine is shown in Table 4. Simple regression analysis was performed for the analysis. The established model was statistically significant ($F=55.004$; $p<0.05$). According to the results, as the confidence level of individuals increases, their attitude scores decrease; That is, as the level of trust increases, positive attitudes increase. One unit increase in individuals' confidence level reduces the scale scores by -1.442 units. In other words, one unit increase in individuals' confidence level now increases their attitude towards Holistic Complementary and Alternative Medicine by 1.442 units. In addition, $DW = 1.520$, which indicates autocorrelation in the established model, was calculated and it was concluded that there was no autocorrelation (Table 6).

DISCUSSION

Complementary and Alternative Medicine is a broad field, is outside the framework of the existing health system, and covers all health treatment methods (6). Today's individuals use CAM methods for the treatment and protection of diseases, where they have a curative and beneficial effect on their health, reduce and treat symptoms that may occur as a result of medical treatment (2, 7). This section discusses the findings obtained as a result of the study regarding the education and knowledge level of intensive care nurses about CAM methods, their use of CAM, their views on CAM methods, and ITATTS.

In the study of Chang et al. (8), 41.2% of health workers stated that they had sufficient knowledge about CAM methods. In the study of Lafçı and Kaşıkçı (9), it was determined that the methods that nurses have the most knowledge about are herbs, massage, diet and acupuncture. In the study conducted by Uraz (10) with surgical nurses, the nurses stated that the most known CAM methods were heat therapy, spiritual therapy, cold compresses, massage, herbal therapy, art therapy, aromatherapy, spiritual therapy, vacuum therapy, leech therapy, cupping and yoga. In the study of Bal et al. (11), it was stated that 79.4% of the nurses knew spa treatments, 75.4% acupuncture, 81% massage and 77.8% herbs. In the study of Yayan and Dağ (7), 37.5% of pediatric nurses knew music therapy, 36.6% knew acupuncture, 49.1% knew herbal treatments, and 33.9% knew massage and meditation methods. In the study of Koçdağ (12), it was stated that 100% of the nurses had knowledge about hypnosis, 98.5% about massage, 98.5% about acupuncture and 95.5% about yoga. In the study conducted by Tracy et al. (13) in the USA, it was found that 82.4% of the nurses had knowledge about massage, 78.7% about therapeutic touch and 82.9% about spiritual therapy. The most frequently mentioned CAM methods in the study of Buchan et al. (14) were cod liver oil, cranberry juice and massage. According to the research conducted by Balouchi et al. (15), the average knowledge of nurses about CAM treatments was 62.2%. An examination of the study shows that the rate of knowing various CAM methods of nurses is high. In our study, it was thought that the reason why nurses' knowledge about CAM methods varied compared to other studies could be due to cultural differences between countries and cities, that some CAM methods are not generally used in our country and that they are not sufficiently included in the education system.

In the study conducted by Görücü (16), 74.7% of the participants stated that they used CAM methods for themselves and their families. In the study conducted by Yayan and Dağ

(7), 48.2% of pediatric nurses stated that they used CAM for individual and family members, while 40.2% stated that they benefited from CAM applications. The result reached in our study is in parallel with the result of Görücü's research. It was observed that most of the nurses preferred CAM methods for themselves and their families.

In the study of Görücü (16), the methods used by nurses for themselves were acupuncture, herbs, prayer, special diets, herbal teas and vitamins. In the study of Lafçı and Kaşıkçı (9), nurses stated that they mostly used herbal treatment (85.4%) and massage (21.9%). In the study of Koçdaş (12), 49.3% of the nurses stated that they used CAM methods, while the CAM methods they used the most were phytotherapy (29.9%), massage (26.9%), hydrotherapy (11.9%) and acupuncture (7.5%). In the study of Bahall and Legall (17), in which the use of CAM by nurses was investigated, 92.4% of the participant nurses stated that they used CAM methods. In a study conducted by Toprak et al. (18), 64% of nurses stated that they used CAM methods in their daily life, while the most frequently used method was hot/cold compress, reiki, herbal products, acupuncture, massage and relaxation exercises. In a study conducted by Xue et al. (19) with nurses in Hong Kong, 80% of the participating nurses stated that they used at least one of the CAM methods, 50.3% used herbal therapy, 54% used massage, 27.8% used aromatherapy and 32.6% of them used reflexology. In the study of Jong et al. (20), 59.7% of the nurses stated that they used massage, 24.8% mind-body therapies, and 51.3% used diet treatments in their own self-care. Buchan et al. (14) found that 41% of nurses used CAM methods. In the study conducted by Samuels et al. (21) with nurses, 87.3% stated that they used CAM methods, 48.6% used herbal medicine, 67.1% used massage, 40.5% used touch therapies, 42.2% used meditation and 39% were found to use prayer methods. In the study of Kahraman and Kirkan (6) with pediatric nurses, it was determined that 26.9% of nurses practiced massage, 16% meditation, and 16% prayer. In our study, it was thought that the reason why nurses' use of CAM methods was different from other studies might be due to cultural differences between countries and cities and that some CAM methods are not generally used in our country.

In the study conducted by Aktaş (2) with nursing students, the students' Attitude Scale towards Integrative Complementary and Alternative Medicine mean score was 31.38 ± 4.40 , the mean Complementary and Alternative Medicine subscale score was 20.42 ± 3.14 and the Integrative Health subscale score was 8.54 ± 3.06 . In the study of Şahin et al. (22), the mean score of the Attitudes towards Complementary and Alternative Medicine Scale was determined as 28.46 ± 5.04 . In the studies of Baltacı and Koç (23), the total scale score average was found to be 28.43 ± 5.05 . In the study of Çınar et al. (24), the total scale score average of nursing students was determined as 25.41 ± 5.25 . In Özşaker's (25) study with senior nursing students, the mean score of the Attitude Scale towards Integrative Complementary and Alternative Medicine was determined as 30.87 ± 4.83 , the mean score of the Complementary and Alternative Medicine sub-dimension

was 21.38 ± 3.60 , and the mean score of the Integrative Health sub-dimension was 9.49 ± 3.35 . In the experimental study conducted by Toygar (26) with nursing students, the mean score of the Attitude Scale towards Holistic Complementary and Alternative Medicine before education was given to the students about CAM was 32.9 ± 4.58 , and it was 26.8 ± 4.18 after the education. In the study conducted by Demirbağ et al. (27) with midwives, the mean score of the Attitude Scale towards Integrative Complementary and Alternative Medicine was determined as 52.5 ± 1.3 , the mean score of the Complementary and Alternative Medicine sub-dimension was 21.5 ± 1.5 , and the mean score of the Integrative Health sub-dimension was 23.2 ± 1.1 . In the study of Erci (28), the mean score of the Attitude Scale towards Integrative Complementary and Alternative Medicine was found to be 58.0 ± 4.1 . In the studies of Baltacı and Koç (23), Toygar (26), Hyland et al. (29), Aktaş (2), Şahin et al. (22), and Çınar et al. (24), it was determined that participants' attitudes towards holistic complementary and alternative medicine were positive. While it was similar, it was seen that the attitude of midwives was not positive in the study of Demirbağ et al. (27). In our study, the mean scores of the scale and its sub-dimensions were found to be compatible with the results of other researchers, except for the study of Demirbağ et al. and Erci. Except for the study of Demirbağ et al., the attitude was positive in our study as well as in all other studies found.

In the studies found, it is seen that there are different results between the demographic characteristics of the participants and their attitudes regarding the use of CAM methods. In the study of Aktaş (2), Erci (28), Özşaker (25), and Çınar et al. (24), no statistically significant difference was observed in terms of using complementary and alternative medicine methods according to gender, while Kavurmacı et al. (30), Toygar (26), Şahin et al. (22), Baltacı and Koç (23), and Radi et al. (31) showed a statistically significant difference according to gender. In this study, it was determined that the scores obtained from the Attitude Scale towards Integrated Complementary and Alternative Medicine and the Complementary and Alternative Medicine sub-dimension showed a statistically significant difference according to the gender of the individual. In the studies in the literature, there is a statistically higher difference between genders. In the study of Demirbağ et al. (27) with midwives, a statistically significant difference was observed in the Attitude Scale towards Integrated Complementary and Alternative Medicine and Complementary and Alternative Medicine sub-dimension at the education level, while this difference was not observed in the holistic health sub-dimension. In this study, however, no statistically significant difference was observed in education level. In the study of Demirbağ et al. (27), a statistically significant difference was observed in the Attitude Scale towards Integrated Complementary and Alternative Medicine and the Complementary and Alternative Medicine sub-dimension in marital status, but this difference was not observed in the Holistic Health sub-dimension. In this study, it was determined that the scores obtained from the Attitudes towards Holistic Complementary and Alternative Medicine Scale, Complementary and Alternative Medicine and Holistic Health sub-dimensions

showed a statistically significant difference according to the marital status of the individual. In the study of Demirbağ et al. (27), a statistically significant difference was observed in the Attitude Scale towards Integrated Complementary and Alternative Medicine and in the Complementary and Alternative Medicine sub-dimension, while this difference was not observed in the Holistic Health sub-dimension during the study period. In this study, it was determined that while there was a significant difference in the Attitudes towards Integrative and Alternative Medicine Scale, the scores obtained from the Complementary and Alternative Medicine and Integrative Health sub-dimensions did not show a statistically significant difference according to the duration of the study. In the study of Demirbağ et al. (27), there was a statistically significant difference in the Attitude Scale towards Integrative and Alternative Medicine, Complementary and Alternative Medicine and Integrative Health sub-dimensions of chronic disease state, whereas in this study, there was a statistically significant difference in the Attitude Scale towards Integrative and Alternative Medicine and Complementary and Alternative Medicine sub-dimension showed a statistically significant difference according to the chronic disease of the individual.

CONCLUSION AND RECOMMENDATIONS

In line with the data of the research; It was determined that the attitudes and behaviors of intensive care nurses regarding CAM methods and practices were inadequate and that they needed to raise more awareness on the subject. The group with the highest attitude of intensive care nurses towards CAM was those whose graduation year was between 2010 and 2016, and the group with the lowest was those with chronic diseases. In line with these results, it is thought that it is necessary to increase the awareness of intensive care nurses by organizing in-service training programs and to provide training services to health workers in outpatient clinics related to CAM methods. In addition, it is recommended that CAM methods, which have been scientifically tested and based on evidence, be included in patient care and treatment practices by nurses in support of modern treatment, and institutional procedures should be established for this. The limitation of the study is that it was conducted only with intensive care nurses working in a hospital

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