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ORIGINAL ARTICLE

The Use of Complementary Medicine Methods by the Nurses Working During the COVID-19 Pandemic

COVID-19 Pandemi Sürecinde Çalışan Hemşirelerin Tamamlayıcı Tıp Yöntemlerini Kullanma Durumları

Ayşin Tepe[1], Hatice Karabuğa Yakar[2]

[1]Department of Nursing, Marmara University Institute of Health Sciences, İstanbul, Turkey
[2]Department of Nursing, Marmara University Faculty of Health Sciences, İstanbul, Turkey

Abstract

Objective: This study aimed to determine the use of complementary medicine methods by nurses working on the front line during the Coronavirus disease-2019 (COVID-19) pandemic.

Method: The study was planned as a descriptive and cross-sectional type and carried out in a training and research hospital in İstanbul with 208 nurses. Nurse Identification Form and Complementary and Integrative Health Assessment for Health Practitioners Scale were used to collect data. Descriptive statistics, Mann-Whitney U test, Kruskal-Wallis test were used to evaluate the data.

Results: The mean age of the nurses was 34.25±6.3 years. 86.5% were women, 76% had a bachelor's degree, 37% had been working for ten years or more, and 68.8% used complementary medicine methods during the pandemic. In the study, the use of complementary medicine methods was higher in the nurses with a bachelor's degree, those with an average economic status, those with a family member over the age of 65 who had a chronic disease, those who received training on complementary medicine methods, used complementary medicine methods during the pandemic, and those who recommended complementary medicine methods to their relatives and patients.

Conclusion: Complementary integrative health assessment scores of the nurses were above average. The majority used complementary medicine methods and they had an increasing interest in integrating these methods into their professional practices.

Keywords: COVID-19, nursing, pandemic, complementary medicine methods

Öz

Amaç: Bu çalışma Koronavirüs hastalığı-2019 (COVID-19) pandemi sürecinde çalışan hemşirelerin tamamlayıcı tıp yöntemlerini kullanma durumlarını belirlemek amacıyla planlandı.

Yöntem: Tanımlayıcı ve kesitsel tipte yapılan bu araştırma, İstanbul'da bir eğitim araştırma hastanesinde 208 hemşire ile yürütüldü. Veri toplama aracı olarak hemşire tanılama formu ve sağlık profesyonelleri için tamamlayıcı ve bütüncül sağlık değerlendirme ölçeği kullanıldı. Verilerin değerlendirilmesinde tanımlayıcı istatistikler, Mann-Whitney U testi, Kruskal-Wallis testi kullanıldı.

Bulgular: Yaş ortalaması 34,25±6,3 yıl olan hemşirelerin, %86,5'i kadın, %76'sı lisans mezunu, %37'si on yıl ve üzeri çalışmakta, %68'i pandemi süreci boyunca tamamlayıcı tıp yöntemlerini kullanmaktaydı. Çalışmada lisans mezunu hemşirelerde, ekonomik durumu orta olanlarda, ailesinde 65 yaş üstü kronik hastalığa sahip birey bulunanlarda, tamamlayıcı tıp yöntemleri hakkında eğitim alanlarda, pandemi sürecinde tamamlayıcı tıp yöntemi kullananlarda, tamamlayıcı tıp yöntemlerini yakınlarına ve hastalara önerenlerde tamamlayıcı tıp yöntemlerini kullanma durumlarının daha yüksek olduğu bulundu.

Sonuç: Hemşirelerin tamamlayıcı ve bütüncül sağlık değerlendirme puanları ortalamanın üstündeydi. Hemşirelerin çoğunluğu tamamlayıcı tıp yöntemlerini kullanmaktaydı ve bu yöntemleri mesleki uygulamalarına entegre etme konularında ilgilerinin arttığı görüldü.

Anahtar Kelimeler: COVID-19, hemşirelik, pandemi, tamamlayıcı tıp yöntemleri

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Corresponding Author:
Hatice Karabuğa Yakar, hatice.karabuga@gmail.com

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Introduction

Coronavirus disease-2019 (COVID-19) is a global crisis that threatens people. Due to the mild course and even the absence of symptoms, it spread rapidly and had a great impact on health, economy and social domains globally (1). Throughout history, people have used natural resources to protect their well-being or fight emerging dangers. Standing the test of time, this practice may vary by place and time. Research and demands for complementary medicine methods have increased with the COVID-19 pandemic, as in past epidemics (2,3).

Clinical studies have reported that complementary medicine methods have positive effects on COVID-19, that its use alongside modern western medicine will be beneficial and that it is effective in managing the symptoms of COVID-19 (4-9).

The use of complementary medicine methods mainly aims at physiological resilience and psychological relaxation. Complementary medicine is therefore specifically important for groups at risk, but anyone can benefit from it during the pandemic. COVID-19 has affected the chronically ill people, the elderly, children and undoubtedly many healthcare professionals (10-12). Nurses, in particular, who are in constant contact with the patient, were physically and psychologically burdened (13-16).

During the pandemic, nurses sought alternative options for protecting, improving and developing their physical and mental health. One of them is complementary medicine methods, which have recently been the focus of attention of people. Nurses have turned to the complementary medicine also in the past to reduce the stress and anxiety they experience, to protect their health and to protect themselves from diseases more than other healthcare professionals (17,18). During the COVID-19 pandemic, nurses are physically and psychologically more vulnerable compared to the general population (19,20). According to the literature, the most common problems the nurses experience were fear of being infected, change in family order, caring for the patient with fear, social stigma, difficulty working with personal protective equipment, physical injury caused by the equipment, changing practice guidelines, loneliness, fear of getting the disease, and fear of transmitting the disease to family members (21-23). Given the problems the nurses go through, it is inevitable that they resort to complementary medicine methods (24). We believe it is important to determine the use of complementary medicine methods by nurses, who are pioneers in community education and spend the longest time with the patient. This study was conducted to determine the use of complementary medicine methods by nurses working during the COVID-19 pandemic.

Main Points

- Nurses use complementary medicine methods; recommend it to patients and their families.
- It is very important that nurses, who are at every step in the development and improvement of the health of the society, are informed about the purpose of use, risks, side effects, patient follow-up, and patient education of complementary medicine methods.

Material and Methods

Type of Research

This study was done in a descriptive and cross-sectional design.

Research questions

- How are the use of complementary medicine methods by nurses working during the COVID-19 pandemic process?

- Does the use of complementary medicine methods by nurses differ according to the introductory characteristics of nurses?

- Does the use of complementary medicine methods by nurses differ according to the nurses' views on the COVID-19 process?

- Does the use of complementary medicine methods by nurses differ according to the nurses' views on complementary medicine methods?

Study Population

The research was carried out between December 2020 and May 2021 in a training and research hospital on the Anatolian side of İstanbul, affiliated to the Provincial Health Directorate. The population of the study covered 268 nurses providing care to COVID-19 patients in the same hospital between the study dates. While the aim was to reach all nurses, the study was completed with 208 nurses who provided care to COVID-19 patients independently, agreed to participate in the study and filled out the data collection forms completely. Data were collected by face-to-face interview method.

Measuring Tools

"Nurse identification form" and "complementary and integrative health assessment for practitioners scale" were used to collect data.

Nurse Identification Form: The form was prepared by the researcher and includes 34 questions examining nurses' personal details and professional characteristics, their views on COVID-19 and on complementary medicine methods (25-27).

Complementary and Integrative Health Assessment for Practitioners Scale (CIHAP): It was developed by Berger and Johnson (4,28). The scale assesses practitioners' current knowledge of complementary and integrative health and their interest in integrating them into their practice. It was adapted into Turkish by Hançerlioğlu et al. (29). The Turkish version of the scale has 12 items and a five-point Likert-type rating ranging from 1 to 5 as "I strongly agree

(5)" and "I strongly disagree (1)". There are two subscales, namely openness to complementary and integrative health (OCIH) (4,6-10) and intentional practices (IP) (1-3,5,11,12). The lowest score that can be obtained from the scale is 12 and the highest is 60. Item 6 is reverse scored. Higher scores from the scale indicate practitioners' increased knowledge on complementary and integrative health and increased interest in integrating them into their practice. The internal consistency coefficient was 0.93 in the Turkish adaptation study of the scale. In this study, the total, IP and OCIH subscale internal consistency coefficients were 0.85, 0.77 and 0.81, respectively.

Statistical Analysis

Statistical analyzes of the data obtained from the study were performed using the NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) software. Descriptive statistical methods (mean, standard deviation, median, frequency, percentage, minimum, maximum) were used in evaluating the study data. The fit of the quantitative data to normal distribution was tested with the Shapiro-Wilk test and graphical examinations. The Mann-Whitney U test was used for comparisons between two groups of quantitative variables without normal distribution, and the Kruskal-Wallis test was used for comparisons between more than two groups of quantitative variables without normal distribution. Bonferroni test was used for multiple comparisons. Statistical significance was set at $p<0.05$.

Ethical Considerations

Ethical approval was obtained from the Ethics Committee of the Marmara University (16.11.2020-98) where the study was conducted, in accordance with the Declaration of Helsinki, and institutional permission was obtained from the hospitals where the study would be conducted. Written informed consent was obtained from each participant before the study.

Results

Nurses' scores from the OCIH subscale ranged from 6 to 30, with a mean score of 21.95±3.73. Their scores from the IP subscale ranged from 6 to 30, and their mean score was 19.28±4.16. Their total score from CIHAP ranged between 12 and 55 and their mean score was 41.23±6.98 (Table 1).

Of the nurses participating in the study, 86.5% were female and 13.5% were male. Their mean age was 34.25±6.31 years. 60.1% were married and 76% had a bachelor's degree. 52.9% had a family member over 65 years of age with a chronic disease. 69.7% had average economic status. 33.7% were smokers, 20.2% used alcohol and 19.2% had a chronic disease. As for the units they worked, 45.2% were working in the clinics (Table 2).

According to the answers given by the nurses to the questions about the COVID-19 pandemic, 76% gave care to patients diagnosed with COVID-19, 51.9% were diagnosed with COVID-19, and 62% were afraid of being diagnosed with COVID-19. As the causes of fear, 64.9% told that they feared infecting their family and loved ones (Table 2).

23.1% of the nurses described that they received training on complementary medicine, and 68.8% used complementary medicine methods during the pandemic. Of the nurses using complementary medicine methods, 74.1% used vitamins, 67.8% prayed, 33.6% used herbs, and 50% recommended complementary medicine methods to their relatives and patients during the pandemic. 70.2% of the nurses said that they did not recommend complementary medicine methods because they did not have enough information. 50.5% told that they used complementary medicine methods during the COVID-19 pandemic because they strengthened the immune system (Table 2).

By level of education, nurses with a bachelor's degree had higher scores from the IP subscale compared to those with a master's degree or higher ($p=0.036$; $p<0.05$) (Table 2). The total scores of the nurses with a bachelor's degree from the scale were higher than those with a master's degree or higher ($p=0.029$; $p<0.05$) (Table 2).

The nurses with a family member over 65 years of age with a chronic disease had higher scores from the OCIH subscale than those with a family member over 65 years of age without a chronic disease ($p=0.033$; $p<0.05$) (Table 2).

By their economic status, the nurses with average economic status had higher scores from the IP subscale than those with good economic status ($p=0.018$; $p<0.05$) (Table 2).

The total scores of the nurses who used alcohol from the CIHAP scale were higher than those who did not ($p=0.034$; $p<0.05$) (Table 2).

Table 1.
Distribution of Total and Sub-Scores of the Complementary and Integrative Health Assessment for Practitioners Scale (n=208)

CIHAP scale	Number of questions	Mean ± standard deviation	Median (min-max)
Openness to complementary and integrative health	6	21.95±3.73	22 (6-30)
Intentional practices	6	19.28±4.16	20 (6-30)
CIHAP total scale	12	41.23±6.98	42 (12-55)

CIHAP=complementary and integrative health assessment for practitioners scale

There was no difference between the OCIH and IP subscales of the CIHAP scale and the total scores the nurses received from the scale by whether they provided care to a COVID-19 patient, were diagnosed with COVID-19 or were afraid of being diagnosed with COVID-19 (p>0.05) (Table 3).

When the results from the comparison of the total and subscale scores of the CIHAP scale according to the views of the nurses about complementary medicine methods are examined, nurses who received complementary medicine training were found to have higher scores from the IP subscale of CIHAP than those who did not receive complementary medicine training (p=0.001; p<0.01) (Table 4).

The total scores of the nurses who received complementary medicine training from the CIHAP scale were higher than those who did (p=0.013; p<0.05) (Table 4).

Nurses who used complementary medicine methods during the pandemic had higher total scores from the CIHAP scale and their scores from the OCIH and IP subscales were also higher than those who did not use complementary medicine methods (p=0.003, p=0.003, p=0.007; p<0.01) (Table 4).

Nurses who recommended complementary medicine methods to their relatives or patients during the pandemic had higher scores from the CIHAP scale and their scores from the OCIH and IP subscales were also higher (p=0.003, p=0.003, p=0.007; p<0.01) (Table 4).

Discussion

The COVID-19 pandemic is physically and psychologically threatening for many people and nurses, who work during the pandemic and are in constant contact with the patient, are undoubtedly among the most vulnerable groups. During the pandemic, nurses sought alternative options for protecting, improving and developing their physical and mental health. In our study, the use of complementary medicine methods by nurses, who are pioneers in the education, protection and development of public health, was investigated.

Table 2.
Comparison of Total and Sub-dimensional Scores of the Complementary and Integrative Health Assessment for Practitioners Scale According to Nurses' Descriptive and Professional Characteristics (n=208)

Characteristics	n (%)	Openness to complementary and integrative health	Intentional practices	CIHAP total scale
		Mean ± standard deviation median (min-max)	Mean ± standard deviation median (min-max)	Mean ± standard deviation median (min-max)
Gender				
Female Male	180 (86.5) 28 (13.5)	21.92±3.86; 22 (6-30) 22.11±2.78; 23 (16-29)	19.37±4.30; 20 (6-30) 18.75±3.07; 19 (12-26)	41.29±7.22; 42 (12-55) 40.86±5.35; 42 (28-50)
Test value (p)		[a]0.843	[a]0.285	[a]0.626
Marital status				
Married Single	125 (60.1) 83 (39.9)	22.14±3.60; 22 (14-30) 21.66±3.92; 22 (6-30)	19.18±4.18; 19 (10-30) 19.43;4.14; 20 (6-28)	41.32±6.88; 42 (26-55) 41.10±7.18; 43 (12-55)
Test value (p)		[a]0.638	[a]0.557	[a]0.931
Education status				
Vocational school Bachelor's degree ≥Master programme	18 (8.6) 158 (76.0) 32 (15.4)	22.06±2.53; 23 (17-26) 22.13±3.98; 22 (6-30) 20.97±2.83; 22 (15-25)	19.56±2.75; 19 (15-26)[1] 19.54±4.32; 20 (6-30)[2] 17.84±3.75; 18 (11-28)[3]	41.61±4.37; 42 (32-49) 41.68±7.39; 43 (12-55) 38.81±5.61; 39.5 (29-51)
Test value (p)		[b]0.166	**[b]0.043*; 2>3**	**[b]0.035***
Family with chronic disease over 65 years of age				
Yes No	110 (52.9) 98 (47.1)	22.35±3.47; 23 (6-30) 21.50±3.97; 22 (10-30)	19.44±4.03; 20 (6-28) 19.11±4.31; 19 (8-30)	41.78±6.62; 43 (12-55) 40.61±7.36; 41 (18-55)
Test value (p)		**[a]0.033***	[a]0.439	[a]0.162
Economical situation				
Good	47 (22.6)	21.89±3.67; 23 (10-30)	17.89±3.76; 19 (8-25)[1]	39.79±6.85; 41 (18-52)
Average Poor	145(69.7) 16 (7.7)	21.94±3.84; 22 (6-30) 22.19±2.99; 23 (17-26)	19.77±4.30; 20 (6-30)2 18.94±3.04; 19.5 (11-23)3	41.71±7.23; 43 (12-55) 41.13±4.36; 42.5 (32-47)
Test value (p)		[b]0.909	**[b]0.021*; 2>1**	[b]0.274

As a result of this study, which was conducted to determine the use of complementary medicine methods by nurses working in the COVID-19 pandemic, it was seen that the nurses scored above the average in the subscales of the scale and in total (Table 1).

This is the first study conducted in our country to evaluate nurses' knowledge of complementary and integrative health assessment and their interest in integrating it into their practices. For this reason, the results of the study were compared with the results of the studies conducted with healthcare professionals in different disciplines using different scales. Gör and Duru Aşiret (30), Ilori et al. (31) and Teke et al. (32) and Yesse et al. (33) reported that nurses, medical students and healthcare workers had positive attitudes towards complementary medicine methods for COVID-19.

Nurses in our study differed in using complementary and integrative health assessment by their education, economic status, whether they had a family member over 65 years of age with chronic diseases, received training on complementary medicine methods, used complementary medicine methods during the pandemic and recommended complementary medicine methods to their relatives and patients (Tables 2-4).

The nurses with a bachelor's degree had higher scores from the CIHAP and from the IP subscale than those with a master's degree or higher (Table 2). Differently, in the study of Teke et al. (32), university graduate health workers had more positive attitudes towards complementary medicine methods than vocational school graduates. In the study of Cinar et al. (34), senior nursing students had a negative attitude towards complementary medicine practices compared to first-year nursing students. From the results of the study, it was concluded that the approach to complementary medicine methods differed by education level (35).

In our study, most of the nurses had not received training on complementary medicine methods, but more than half of them used complementary medicine methods (Table 4). The fact that nurses' attitudes are differed by their education

Table 2.
Comparison of Total and Sub-dimensional Scores of the Complementary and Integrative Health Assessment for Practitioners Scale According to Nurses' Descriptive and Professional Characteristics (n=208) (Continued)

Characteristics	n (%)	Openness to complementary and integrative health Mean ± standard deviation median (min-max)	Intentional practices Mean ± standard deviation median (min-max)	CIHAP total scale Mean ± standard deviation median (min-max)
Unit of work				
Administration	13 (6.3)	23.38±3.20; 24 (14-27)	21.00±4.06; 21 (12-27)	44.38±5.03; 44 (37-52)
Service (clinical area)	94 (45.2)	22.04±3.35; 23 (14-30)	19.53±4.00; 20 (10-30)	41.57±6.39; 42 (26-55)
Policlinic	21 (10.1)	21.10±3.35; 21 (16-30)	18.76±4.00; 19 (13-28)	39.86±6.30; 38 (32-52)
Intensive care unit	31 (15.0)	22.35±3.78; 23 (10-29)	19.71±3.60; 20 (8-26)	42.06±6.94; 43 (18-55)
Emergency department	27 (13.0)	22.04±3.75; 23 (15-29)	18.52±4.58; 19 (11-28)	40.56±7.32; 42 (26-53)
Other (blood collection unit, endoscopy etc.)	22 (10.6)	20.82±5.44; 20 (6-30)	18.05±5.05; 19.5 (6-26)	38.86±9.83; 40 (12-55)
Test value (p)		[b]0.098	[b]0.298	[b]0.219
Smoking				
Yes	70 (33.7)	22.57±4.02; 23 (6-30)	70.00±19.26; 4.3 (20-6)	41.83±7.49; 43 (12-55)
No	128 (61.5)	21.59±3.52; 22 (10-30)	128.00±19.29; 4.2 (20-8)	40.88±6.81; 42 (18-55)
Left	10 (4.8)	22.10±4.04; 23 (16-30)	10.00±19.40; 2.2 (19,5-16)	41.50±5.74; 42.5 (32-54)
Test value (p)		[b]0.137	[b]0.987	[b]0.476
Alcohol use				
Yes	42 (20.2)	22.19±5.00; 23 (6-30)	20.07±5.20; 21 (6-29)	42.26±9.50; 45 (12-54)
No	165 (79.3)	21.87±3.36; 22 (14-30)	19.08±3.85; 19 (10-30)	40.96±6.21; 42 (26-55)
Test value (p)		[a]0.129	[a]0.054	[a]**0.034**
Presence of chronic disease				
Yes	40 (19.2)	22.15±4.06; 22 (14-30)	18.28±4.28; 19 (10-25)	40.43±7.40; 42 (26-54)
No	168 (80.8)	21.90±3.66; 22 (6-30)	19.52±4.10; 20 (6-30)	41.42±6.89; 42 (12-55)
Test value (p)		[a]0.708	[a]0.151	[a]0.502

*[a] Mann-Whitney U test, [b] Kruskal-Wallis test, *p<0.05, CIHAP=complementary and integrative health assessment for practitioners scale*

level and that nurses who did not receive training tended to use complementary medicine methods more suggest a risk for uninformed use. In our study, the nurses with a master's degree were more aware of their risks and side effects, which was the reason they used these methods less. It is therefore important to inform nurses about the use of complementary medicine methods within the scope of university curricula and in-service training programs in clinical settings during nursing education.

The nurses in our study who had an average economic status had higher IP subscale scores than those with

Table 3.
Comparison of Total and Sub-dimensional Scores of the Complementary and Integrative Health Assessment for Practitioners Scale According to Nurses' Views on the COVID-19 Process (n=208)

Characteristics	n (%)	Openness to complementary and integrative health	Intentional practice	CIHAP total scale
		Mean ± standard deviation median (min-max)	Mean ± standard deviation median (min-max)	Mean ± standard deviation median (min-max)
Caring for a patient diagnosed with COVID-19				
Yes	158 (76.0)	21.82±3.81; 22 (6-30)	19.18±4.05; 20 (6-29)	40.99±6.94; 42 (12-55)
No	50 (24.0)	22.36±3.48; 22.5 (14-30)	19.62±4.49; 20 (10-30)	41.98±7.13; 43.5 (27-54)
Test value (p)		[a]0.378	[a]0.521	[a]0.332
Diagnosed with COVID-19				
Yes	108 (51.9)	21.78±3.53; 22 (10-30)	19.08±4.06; 19 (8-30)	40.86±6.43; 42 (18-55)
No	100 (48.1)	22.13±3.95; 23 (6-30)	19.50±4.27; 20 (6-28)	41.63±7.55; 43 (12-55)
Test value (p)		[a]0.287	[a]0.298	[a]0.170
Fear of being diagnosed with COVID-19				
Yes	129 (62.0)	22.09±3.31; 22 (14-30)	19.06±3.85; 19 (11-30)	41.16±6.19; 42 (26-55)
No	79 (38.0)	21.71±4.34; 22 (6-30)	19.65±4.61; 20 (6-29)	41.35±8.16; 43 (12-54)
Test value (p)		[a]0.697	[a]0.265	[a]0.450

[a] Mann-Whitney U test, COVID-19=Coronavirus disease-2019, CIHAP=complementary and integrative health assessment for practitioners scale

Table 4.
Comparison of Total and Sub-dimensional Scores of the Complementary and Integrative Health Assessment for Practitioners Scale According to Nurses' Views on Complementary Medicine Methods (n=208)

Characteristics	n (%)	Openness to complementary and integrative health	Intentional practices	CIHAP total scale
		Mean ± standard deviation median (min-max)	Mean ± standard deviation median (min-max)	Mean ± standard deviation median (min-max)
Training in complementary medicine				
Yes	48 (23.1)	22.27±3.98; 23 (10-30)	20.75±4.15; 22 (8-28)	43.02±7.47; 44 (18-55)
No	160 (76.9)	21.85±3.66; 22 (6-30)	18.84±4.07; 19 (6-30)	40.69±6.76; 42 (12-55)
Test value (p)		[a]0.399	**[a]0.001***	**[a]0.013***
The situation of using complementary medicine methods in the pandemic process				
Yes	143 (68.8)	22.43±3.42; 23 (10-30)	19.85±3.95; 20 (8-30)	42.28±6.28; 43 (18-55)
No	65 (31.3)	20.89±4.17; 21 (6-30)	18.03±4.34; 18 (6-28)	38.92±7.89; 38 (12-55)
Test value (p)		**[a]0.003***	**[a]0.007***	**[a]0.003***
Recommendation of complementary medicine methods				
Yes	104 (50.0)	23.01±3.47; 23 (10-30)	20.51±4.06; 21 (8-30)	43.52±6.44; 44 (18-55)
No	104 (50.0)	20.88±3.70; 21 (6-30)	18.06±3.89; 18.5 (6-27)	38.94±6.78; 40 (12-52)
Test value (p)		**[a]0.001***	**[a]0.001***	**[a]0.001***

*[a] Mann-Whitney U test, *p<0.05, CIHAP=complementary and integrative health assessment for practitioners scale*

good economic status (Table 2). Gökçe and Gürdoğan (36) reported that lower-income hypertension patients had a more positive attitude towards complementary medicine. It appears from the study results that individuals with low income use complementary medicine methods more and have a more positive attitude towards these methods (36).

More than half of the participants in this study had a family member over the age of 65 with a chronic disease (Table 2). These nurses had higher scores from the OCIH subscale of CIHAP than those who did not have a family member over the age of 65 with a chronic disease (Table 2). Ejaz et al. (37), emphasized the importance of disease management in individuals with chronic diseases such as hypertension, cardiovascular diseases, diabetes, malignancy, COPD and asthma during the COVID-19 period and stressed that they should take preventive measures to protect themselves as their lives may be at stake if they get COVID-19. Another supportive study by Fernandez et al. (38) found higher mortality rates for patients over the age of 65 who were hospitalized due to COVID-19. Individuals over the age of 65 with chronic diseases are a vulnerable group for COVID-19. Nurses can use complementary medicine methods to support and improve the health of both them and their families.

Again, more than half of the participants stated that they used complementary medicine methods during the pandemic (Table 4). The most used complementary medicine methods were vitamins by the majority, followed by prayer used by more than half of them. Higher scores were found in both subscales of CIHAP for participants who used complementary medicine methods during the pandemic compared to those who did not (Table 4). There are differing results regarding the use of complementary medicine methods by nurses. Gör and Duru Aşiret (30) conducted a study across Turkey to determine the attitudes of nurses towards complementary medicine methods for COVID-19 and found that the use of complementary medicine methods was low, contrary to our findings. The reason for the low rate was attributed to the uncertainty regarding COVID-19. According to Midilli et al. (39), herbs was the most commonly used method among healthcare professionals. Similarly, Lafçı and Kara Kaşıkçı (40) listed herbs as the most frequently used method by healthcare personnel. The differences in the most used methods can be affected by the cultural structure and level of development of the country. The reason for the high demand for herbs may be because they have been used therapeutically in all civilizations from the past to the present and are also easily accessible.

Participants who recommended complementary medicine methods to their relatives or patients during the pandemic had higher scores from the OCIH and IP subscales of CIHAP than those who did not (Table 4). While half of the participants in the study did not recommend complementary medicine methods to their relatives or patients during the pandemic, the other half recommended complementary medicine methods to their relatives or patients during the pandemic. Jones et al. (35) reported that more than half of the nurses recommended complementary medicine methods to others, but almost all of them had received formal training. It has been stated in many studies that the reason why nurses who take active roles in all areas such as the development, improvement and rehabilitation of public health do not recommend and use complementary medicine is their lack of knowledge (25,26,41,42).

The participants who received complementary medicine training scored higher in the IP subscale of CIHAP than those who did not (Table 2). Nurses' need for complementary medicine education is a fact supported by the literature (25,41,42). The willingness of the society to use complementary medicine methods and their actual use of them are increasing. Zeighami and Soltani-Nejad (27) emphasized that nurses should have comprehensive knowledge about complementary medicine methods to be able to advise patients about the risks and side effects of these methods and to answer their questions. 95% of the nurses agree with this and think that they should have knowledge about complementary medicine methods.

Study Limitations

The research was conducted in a single centre. A high number of nurses were diagnosed with COVID-19 and were therefore on medical leave, which adversely affected the data collection process.

Conclusion

Nurses had above average scores from the complementary and integrative health assessment for practitioners scale. The majority of them were using complementary medicine methods and their interest in integrating these methods into their professional practices has increased. Most of the nurses stated that they used vitamins, prayed and benefited from herbs as complementary medicine methods.

Recommendations

Planning in-service training for nurses in clinical settings will contribute to ensuring the competence of nurses in this regard and addressing this issue in the content of the nursing curriculum in undergraduate education will contribute to developing awareness in nursing students. The duties, authorities and responsibilities of nurses about complementary medicine methods should be clearly defined and guides should be created, and nurses should be able to access these guides.

Ethics Committee Approval: Ethical approval was obtained from the Ethics Committee of the Marmara University (16.11.2020-98) where the study was conducted, in accordance with the Declaration of Helsinki, and institutional permission was obtained from the hospitals where the study would be conducted.

Informed Consent: Written informed consent was obtained from each participant before the study.

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