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ORIGINAL RESEARCH

Evaluation of the Knowledge, Attitudes and Behaviors of Midwives and Nurses about Traditional and Complementary Treatment Methods

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Abstract

Objective: This research aims to determine the knowledge, attitudes, and behaviours of midwives and nurses with regard to traditional and complementary treatment methods.

Material-Method: This descriptive, cross-sectional study was carried out between May and August 2021 with the participation of 248 midwives and nurses working in a District Health Directorate in the Mediterranean Region. A questionnaire about the knowledge and opinions of midwives and nurses with regard to traditional and complementary medicine, prepared by the researchers by reviewing the literature, and the Attitudes towards Holistic Complementary and Alternative Medicine Scale were used to collect the study data. In the comparison of quantitative data, the Student-t testi and Mann-Whitney U test was used in the case of two groups, and the Oneway Anova and Kruskal-Wallis test was used for more than two groups. Also, Pearson Korelasyon Coefficient was used to evaluate the linear relationship between two numerical measurements.

Results: In order to prevent the unconscious use of Complementary and Alternative Medicine methods among the public, it is important for midwives and nurses to have sufficient knowledge about these methods and to investigate their level of knowledge**.** The Scale mean score of the midwives and nurses was determined as 26.86±7.46. The negative, weak correlation between the ages of the participants and their Complementary and Alternative Medicine sub-dimension score was found to be statistically significant (p=0,001; p<0,01). The negative, weak correlation between the ages of the participants and their Holistic Health sub-dimension score was found to be statistically significant (p=0,022; p<0,05).

Conclusion: Although the midwives and nurses lacked knowledge about Traditional and Complementary Medicine methods, their attitudes were positive and they were willing to receive training. All midwives and nurses interested in or practicing CAM should be strengthened in this field in order to gain necessary skills by participating in training programs.

Keywords: Traditional and Complementary Medicine, Midwife, Nurse.

INTRODUCTION

Traditional and Complementary Medicine (TCM) involves all historical health care practices, techniques and methods, and the related knowledge, beliefs, and social experiences, that differ from the current healthcare system[1]..Throughout history, humanity has had to struggle with many diseases and has tried to find ways of treating these diseases with inherited techniques that use materials obtained from nature. Traditional treatment methods emerged as a result of the search for health care solutions that can be applied in various cultural contexts and with regard to different religious beliefs, philosophies, and experience[2].The World Health Organization (WHO) has defined traditional medicine practices as “the sum total of the knowledge, skill, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness"[3,4]. In the TCM regulations published by the Ministry of Health in Türkiye in 2014, fourteen traditional and complementary medicine methods were defined for the first time[5]. These methods were apitherapy, phytotherapy, hypnosis, homeopathy, leech therapy, chiropraxis, cupping, larva therapy, mesotherapy, prolotherapy, osteopathy, ozone therapy, reflexology, and music therapy[6,7].

TCM methods are methods used to support conventional treatment. The main purpose of using these methods is to improve quality of life and reduce symptoms. Also, It is stated that the use of complementary therapy provides holistic care and the opportunity to respond to the wishes and needs of the society. However, in terms of patient safety and the need to provide quality services with a holistic approach, and in order for these methods to attain their goals, it is important that healthcare professionals are knowledgeable about these practices, that they are able to prevent any potential harm to or abuse of patients, and that they choose evidence-based techniques[8-11]. So, adding evidence-based complementary and integrated practices to midwifery and nursing curriculum, developing nursing practices related to these techniques and determining effective strategies are very important in terms of advising patients and their relatives about these methods[11-13]. In this regard, it is vital that views of midwives and nurses about complementary and alternative treatments be determined. This study thus aimed to determine the knowledge, attitudes, and behaviors of midwives and nurses working in a district of the Mediterranean region with regard to traditional and complementary treatment methods.

MATERIALS AND METHODS

Study design

This study had a cross-sectional, descriptive design.

Participants and setting

A total of 266 midwives and nurses working in a district in the Mediterranean Region constituted the universe of the study. Sample selection was not conducted in the research. The study was conducted between May and August 2021 with 248 midwives and nurses who agreed to participate. Inclusion criteria of the study consists of individuals (a) worked as midwives and nurses, (b) who filled in all scales, and (h) who have agreed to participate in the research. The data were collected face to face, following the rules of social distance and mask. The questionnaires were filled by the participants in an average of 5-10 minutes.

Outcome measurement tools

An Information Form (15 questions) prepared by the researchers after reviewing the literature[5,7-10] and the Attitudes towards Holistic Complementary and Alternative Medicine Scale (AHCAMS) (11 items) were used to collect study data. The study was conducted in accordance with principles of the Declaration of Helsinki.

Attitudes towards holistic complementary and alternative medicine scale [AHCAMS]

This scale was developed by Hyland et al[14]. in 2003 and its Turkish validity and reliability study was carried out by Erci[15]. The scale, which determines attitudes towards complementary and alternative medicine, consists of 11 items in a 6-point Likert-type scale. The scale has two sub-dimensions, Complementary and Alternative Medicine (CAM) and Holistic Health. The lowest score that can be obtained from the scale is 11, and the highest score is 66. As the score of the scale decreases, positive attitudes towards complementary and alternative medicine increase. The Cronbach alpha reliability coefficient of the scale is 0.72[15]. In our study, the cronbach alpha value was found 0.77.

Statistical analysis

Statistical analysis was performed using the Number Cruncher Statistical System (NCSS) 2007 (Kaysville, Utah, USA) software. Descriptive statistical methods (mean, standard deviation, median, frequency, percentage, minimum, maximum) were used to analyze the study data. In the comparison of quantitative data, the Student-t testi and Mann-Whitney U test was used in the case of two groups, and the Oneway Anova and Kruskal-Wallis test was used for more than two groups. Also, Pearson Korelasyon Coefficient was used to evaluate the linear relationship between two numerical measurements. The results were evaluated at the 95% confidence interval and at a significance level of $p<0.05$.

Ethical considerations

In order to conduct the study, ethical approval (Date: 02.12.2020; Decision No: GO 2020/317) was obtained from the Non-Interventional Clinical Research Ethics Committee of the university involved. Written and verbal consent was obtained from all those participating in the study.

Limitations

There are few limitations to our review. Our sample only represents individuals with nursing and midwife. The findings will not be generalizable to other health professional. Also, because our study was conducted in a center, the results of the study can only be generalized to the place where the study was conducted**.**

RESULTS

The ages of the participants ranged from 19 to 62, with a mean age of 37.95±10.27 years. Among the participants, 41.1% (n=102) were midwives and 58.9% (n=146) were nurses. In terms of education

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level, 71.4% of the participants were university graduates, while 14.5% were high school graduates only. 77.4% of the participants were married and 19.4% had a chronic disease. Among those with chronic diseases, 35.4% had hypertension, 20.8% had diabetes, and 12.5% had allergic asthma (Table 1).

Table 1. Distribution of sociodemographic characteristics (n= 248)

Age	*Mean±SD*	37.95±10.27
		n (%)
Profession	Midwife	102 (41.1)
	Nurse	146 (58.9)
Educational degree	High school graduate	36 (14.5)
	University graduate (Associate degree)	27 (10.9)
	University graduate (Bachelor's degree)	177 (71.4)
	Master's graduate	7 (2.8)
	PhD graduate	1 (0.4)
Marriage	Single	45 (18.2)
	Married	192 (77.4)
	Divorced and widowed	11 (4.4)
Chronic disease	No	200 (80.6)
	Yes	48 (19.4)
	Hypertension	17 (35.4)
	Diabetes	10 (20.8)
	Allergic asthma	6 (12.5)
	Others*	15 (32.3)

* ulcerative colitis (3-6.3), cardiac insufficiency (2-4.2), Familial Mediterranean Fever (2-4.2), panic attack (2-4.2), thyroid cancer (2-4.2), essential thrombocytosis (1-2.1), kidney failure (1-2.1), Ankylosing spondylitis (1-2.1), gastric cancer (1-2.1).

While 96.4% of the participants had heard of TCM treatment, only 5.6% had received TCM training; 84.3% wanted to receive TCM training. In terms of reasons for using TCM, 46.4% of the participants used it for treatment, 9.7% for pain relief, and 1.6% for prevention. 19% of the participants believed that the most effective treatment method was conventional medicine, 0.4% believed that it was TCM alone, and 80.6% believed that the most effective treatment was conventional medicine combined with TCM. 63.3% of the participants were keen to try out TCM. While the percentage of midwives and nurses using TCM was 49.2%, 69% of their patients used it. When the knowledge of the participants about TCM methods was examined, it was determined that 75.4% knew about ozone therapy, 73.8% knew about leech therapy, and 73.4% knew about cupping therapy (Table 2, Figure 1).

Table 2. Distribution of questions regarding CAM (n=248)

		n (%)
Have you heard of CAM?	Yes	239 (96.4)
	No	9 (3.6)
Have you received CAM training?	Yes	14 (5.6)
	No	234 (94.4)
Would you like to receive CAM training?	Yes	209 (84.3)
	No	39 (15.7)
Should CAM be used in patient care?	Yes	209 (84.3)
	No	39 (15.7)
Have you ever used CAM?	Yes	122 (49.2)
	No	126 (50.8)
Have your patients used CAM?	Yes	171 (69.0)
	No	77 (31.0)
Reason for using CAM (n=143)*	Treatment	115 (80.4)
	Relaxation	24 (17.8)
	Protection	4 (2.8)
What do you think is the most effective treatment method?	Medical	47 (19.0)
	CAM	1 (0.4)
	Medical with CAM	200 (80.6)
Status of wanting to apply CAM	Yes	157 (63.3)
	No	91 (36.7)

The scores obtained from the CAM sub-dimension ranged from 6 to 27, with a mean of 15.91±4.60 and α=0.609. The scores obtained from the Holistic Health sub-dimension ranged from 5 to 27, with a mean of 10.94±4.32 and α=0.846. The scores obtained from the total AHCAMS ranged from 11 to 47, with a mean of 26.86±7.46 and α=0.771 (Table 3).

Table 3. Attitudes towards holistic complementary and alternative medicine scale significance (n=248)

	Number of items	**Mean±SD**	**Median (Min-Max)**	**Cronbach's Alpha**
Complementary and Alternative Medicine	6	15.91±4.60	15.5 (6-27)	0.609
Holistic health	5	10.94±4.32	11 (5-27)	0.846
Total	11	26.86±7.46	27 (11-47)	0.771

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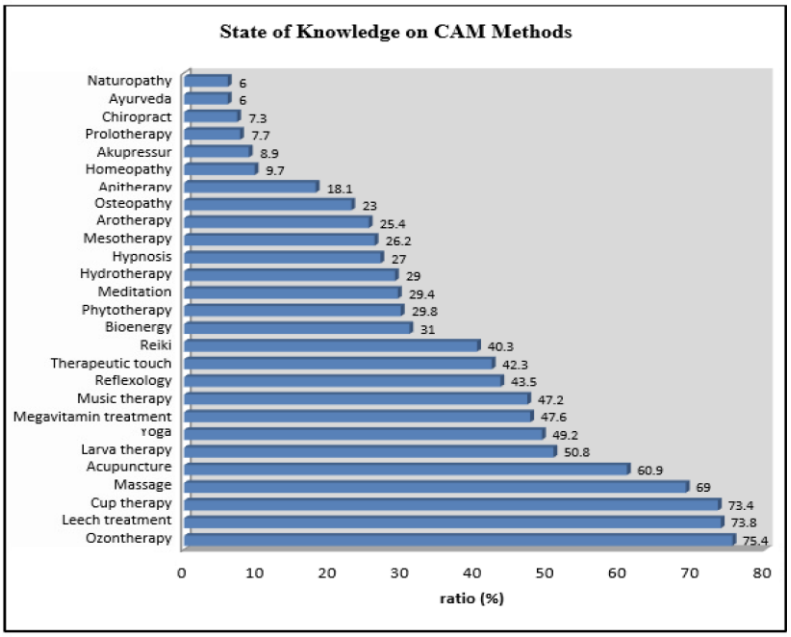

Figure 1. Distribution of knowledge levels on CAM Methods

The negative, weak correlation between the ages of the participants and their CAM sub-dimension score was found to be statistically significant. The negative, weak correlation between the ages of the participants and their Holistic Health sub-dimension score was found to be statistically significant. The negative, weak correlation between the ages of the participants and their total AHCAMS score was found to be statistically significant. The scores of the participants who were nurses for the CAM sub-dimension and the total scale were found to be statistically significantly higher than the scores of the participants who were midwives. The Holistic Health sub-dimension scores and the total scale scores of the participants with a chronic disease were found to be statistically significantly higher than the participants without a chronic disease ($p<0.05$) (Table 4).

Table 4. Evaluation of socio-demographic characteristics according to the attitude scale to integrative complementary and alternative medicine (n= 248)

			Complementary Alternative Medicine	**Holistic health**	**HCAMQ Total score**
Age (year)		r	-0.209ǂ	-0.145ǂ	-0.220ǂ
		p	0.001**	0.022*	0.001**
Marriage	Single (n=45)	Mean±SD	16.82±4.28	12.02±5.33	28.84±7.4
	Married (n=192)	Mean±SD	15.76±4.44	10.63±3.89	26.39±6.93
	Divorced and widowed (n=11)	Mean±SD	15±7.85	12.09±6.2	27.09±13.97
		p	[a]0.211	[a]0.207	[a]0,105
Education degree	High school graduate (n=36)	Mean±SD	15.44±4.23	11.89±3.65	27.33±7.25
	University graduate (Associate degree) (n=27)	Mean±SD	15.89±3.47	10.81±3.27	26.7±5.85
	Undergraduate and above graduate (n=185)	Mean±SD	16.02±4.83	10.78±4.56	26.8±7.74
		p	[b]0,772	[a]0.105	[b]0.920
Profession	Midwife (n=102)	Mean±SD	14.07±4.58	9.17±3.02	23.24±6.59
	Nurse (n=146)	Mean±SD	17.21±4.17	12.19±4.66	29.4±6.99
		p	[c]0,001**	[d]0.086	[c]0.001**
Chronic disease	None (n=200)	Mean±SD	15.6±5.05	8.9±2.7	24.5±6.65
	Yes (n=48)	Mean±SD	16±4.5	11.44±4.5	27.44±7.55
		p	[c]0.598	[d]0.001**	[c]0.014*

*[a]Kruskal Wallis Test, [b]Oneway Anova Test, [c]Student t-Test, [d]Mann-Whitney U Test, ǂPearson Korelasyon Coefficient, *p<0,05, **p<0,01*

DISCUSSION

While individuals' quality of life and average life expectancy have increased as a result of the benefits of modern conventional medicine, the rates of specific, chronic and fatal diseases are increasing. This situation has caused patients, their relatives, and healthcare professionals to seek different solutions, and the use of TCM methods has thus become widespread[16]. This study examined the knowledge, attitudes, and behaviours of midwives and nurses with regard to traditional and complementary treatment methods.

It was determined that while almost all of the midwives and nurses had heard of TCM treatment, very few (5.6%) had received TCM training, and a large majority (84.3%) wanted to receive TCM training. 49.2% of the participants currently used TCM. Similar to our study, Kahraman and Kırkan[17] determined that the majority of pediatric nurses had not received any training on TCM practices but were willing to receive training. The study of Bahall and Legal determined that 92.4% of nurses and 77.1% of other healthcare professionals used complementary therapies[18]. This situation shows that the worldwide use of TCM methods is increasing day by day. The most important thing is to ensure that these methods are used conscientiously by trained and certified practitioners.

In this study, the AHCAMS mean score was found to be 26.86±7.46, and the Holistic Health sub-dimension mean score was found to be 10.94±4.32. The results of our study were found to be similar to the literature in terms of showing that midwives and nurses have positive and moderately positive attitudes towards complementary and alternative medicine. In the study of Teke et al[19]., the mean AHCAMS score was 27.96 ± 5.49. In the study of Cırık et al[20]., it was stated that nurses consider TCM practices to be useful, effective, and cheap, and their attitudes were positive. The positive attitudes of healthcare professionals towards complementary therapies are an important factor in communicating with and supporting individuals in line with their needs.

When the knowledge of the midwives and nurses about TCM methods was examined, it was determined that 75.4% of them knew ozone therapy, 73.8% of them knew leech therapy and 73.4% of them knew cupping therapy. In the study of Özşaker[21], it was determined that senior nursing students had the most knowledge about music therapy (94.6%), acupuncture (93.3%), hypnosis (92.4%), and leech therapy (82.6%). In the study of Yayan and Dag[22], it was determined that 49.1% of the nurses had knowledge about herbal treatments, 36.6% had knowledge about acupuncture, 37.5% had knowledge about music therapy, and 33.9% had knowledge about massage and meditation, and that the nurses involved did not know many TCM practices. In another study, a majority of healthcare professionals (50-75%) reported that they had sufficient knowledge about herbal, spiritual, alternative, and physical types of CAM, but not about energy therapy and therapeutic methods[18]. These results suggest that experimental studies on these methods are useful in understanding the current state of knowledge of these methods. These methods, that used especially by midwives and nurses, have less side effects than modern medicine for support or treatment, safe and It is preferred because it is a non-risky method.

In the study of Cristina et al[23]., patients emphasized that it was important to ask about previous experiences regarding the use of TCM. In the current study, the rate of use of TCM by the patients of midwives and nurses was 69%. This rate was found to be 59.4% in the study of Kocabaş et al[24]., 73.7% in the study of Lotfi et al[25]., and 84.7% in the study of Onyiapat et al[26]. These results show that caregiver midwives and nurses should update their knowledge about TCM methods, and they will be better able to inform individuals about TCM by participating in training programs involving methods they do not yet know.

According to our study findings, there is a significant relationship between age, occupation, and having a chronic disease, and the mean scores of the scale. According to our study, nurses' attitudes towards complementary therapies were found to be better. It is thought that the reason for this is that nurses' attitudes are better because they encounter people with different chronic diseases more. In many studies in the literature,[27,28]., a statistically significant difference was found for the use of CAM practices between the students according to gender, and department. It is similar to our study. Differently from our study findings, in study of Demir[19] on healthcare professionals, it is stated that there is no statistically significant relationship between the mean scores of scale and socio-demographic variables such as gender, marital status, presence of chronic disease,

educational status, and occupation. While Demir's[19] work was done in a big city, our work was done in a rural area. In the literature, it is stated that the use of CAM applications is more especially in rural areas[29]. The level of use of complementary therapies by people living in rural areas is high. It is thought that the difference in the findings may be due to this.

CONCLUSION

As a result, although the midwives and nurses lacked knowledge about Traditional and Complementary Medicine methods, their attitudes were found positive and they were willing to receive training. The use of complementary and alternative treatments allows midwives and nurses to provide holistic care and enables society to turn to the right practices in this process and keeps them away from harmful practices. For this reason, all midwives and nurses interested in/or practicing TCM should be encouraged to gain necessary skills in this field by participating in training programs. Evidence-based TCM treatment should be included in midwifery and nursing education programs. Midwives and nurses should not only know the strengths and limitations of TCM methods but should also be able to inform all segments of society about the effectiveness and possible risks of these procedures. It is clear that more research is needed to evaluate the awareness of these methods, when to apply them, their prevalence, safety, efficacy, and economic benefits.

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