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ORIGINAL RESEARCH

Evaluation of University Students' Attitudes towards Traditional and Complementary Medicine Practices: A Study at a University in Türkiye

Emine Sarman[1], Sevval Kocabiyik[2], Merve Betul Karacif[2], Zahide Nur Karakoyuncu[2], Mustafa Samed Ucar[2], Ahmet Sayar[2], Cagri Yilmaz[2]

[1]Afyonkarahisar Health Sciences University, Faculty of Medicine, Department of Histology and Embryology, Afyonkarahisar, Türkiye
[2]Afyonkarahisar Health Sciences University, Faculty of Medicine Student, Afyonkarahisar, Türkiye

* Corresponding Author: Emine Sarman, e-mail: emine.sarman@afsu.edu.tr

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Abstract
Objective: This study aimed to evaluate the attitudes of students continuing their education in the medical and dental faculties, as well as the nursing and physiotherapy and rehabilitation departments of the Faculty of Health Sciences at Afyonkarahisar Health Sciences University, towards traditional and complementary medicine (T&CM) practices.
Materials-Methods: The study population consisted of students enrolled in the medical, dental, nursing, physiotherapy, and rehabilitation departments of the Faculty of Health Sciences. To reach more participants, the questionnaires and scales were transferred to the Google Forms application, and the survey link was sent to the students via platforms such as email, WhatsApp, and Telegram. The statistical data analysis was performed using the SPSS 25.0 package program, and a significance level of $p<0.05$ was determined.
Results: In our study, which included 1085 students, 64.1% (n=695) were female and 35.9% (n=390) male. The best-known T&CM methods among the participants were reflexology (n=374, 34.5%), osteopathy (n=214, 19.7%), mesotherapy (n=204, 18.8%), hypnosis (n=203, 18.7%), cupping therapy (n=196, 18.1%), chiropractic (n=196, 18.1%), music therapy (n=194, 17.9%), apitherapy (n=188, 17.3%), herbal therapy (n=176, 16.2%), prolotherapy (n=175, 16.1%), and ozone therapy (n=160, 14.7%). Leech therapy (n=153, 14.1%), homeopathy (n=149, 13.7%), and maggot therapy (n=110, 10.1%) were found to be less known.
Conclusion: It was observed that students lack sufficient knowledge about T&CM practices but are interested in receiving education on the subject. Adjustments to the current curriculum of medical, dental, nursing, physiotherapy, and rehabilitation departments would positively contribute to students' attitudes and approaches toward T&CM practices.
Keywords: Traditional and Complementary Medicine, Medical Faculty, Dental Faculty, Faculty of Health Sciences.

INTRODUCTION

According to the World Health Organization (WHO), health is not merely the absence of disease or disability but a state of complete physical, mental, and social well-being.[1] The concept of well-being is defined differently based on values and beliefs. The perception of well-being is determined not only by family, community, social status, biological and environmental factors but also by cultural practices.[2]
In recent years, there has been an increase in the use of traditional and complementary medicine (T&CM) in Türkiye and many other countries. In Türkiye, the "Regulation on Traditional and Complementary Medicine Practices" was published in the Official Gazette on October 27, 2014, under Law No. 29.158. This regulation specifies the methods of T&CM, the training, and authority of practitioners, and the working principles of healthcare institutions. Methods such as acupuncture, apitherapy, phytotherapy, hypnosis, leech therapy (hirudotherapy), homeopathy, chiropractic, cupping therapy, larva therapy, mesotherapy, osteopathy, ozone therapy, reflexology, and music therapy are defined as T&CM.[3]
A multinational cross-sectional survey was conducted on the use of traditional, complementary, and alternative medicine in several countries, including Germany, the United States, Japan, China, Malaysia, Vietnam, Russia, Kazakhstan, and the

United Arab Emirates. In the survey, which involved 1071 participants, more than 50% of the respondents reported being aware of traditional and complementary medicine methods (n = 608, 56.8%) and using various herbal products, including functional health foods or dietary supplements (n = 601, 56.1%). Participants who reported no experience with traditional and complementary medicine mentioned a lack of knowledge as the reason for not using them (n = 222, 20.7%). Furthermore, the potential application of traditional and complementary medicine methods for the treatment and management of infectious diseases such as COVID-19 was emphasized.[4]

In a study conducted with university students in Türkiye, the most well-known T&CM methods were reported as acupuncture (77.5%), cupping therapy (75.3%), and phytotherapy (67.3%). The most commonly used methods were stated as phytotherapy (33.3%) and cupping therapy (11.5%). 94.2% of the participants indicated that medical faculties did not provide sufficient education about T&CM practices, and 82.6% emphasized the necessity of integrating T&CM practices into modern medicine and their implementation by physicians. The study showed that students had insufficient knowledge about T&CM practices and acquired information from other sources.[5]

This study aims to evaluate the attitudes of students continuing their education in the faculties of medicine, dentistry, and health sciences, specifically in nursing and physiotherapy and rehabilitation departments, at Afyonkarahisar Health Sciences University towards traditional and complementary medicine (T&CM) practices.

MATERIALS AND METHODS

Study design

This study is cross-sectional, and a survey link prepared through the Google Forms application was distributed to students between January and March 2023.

Population and sample

The study included students from medical faculties (1st, 2nd, 3rd, 4th, 5th, and 6th grades), dentistry faculties (1st, 2nd, 3rd, 4th, and 5th grades), as well as nursing (1st, 2nd, 3rd, and 4th grades) and physiotherapy and rehabilitation (1st, 2nd, 3rd, and 4th grades) departments of health sciences faculties, who were enrolled in the 2022-2023 academic year.

Data collection tools

The data was collected using the following instruments: "Sociodemographic Characteristics Information Form," "Level of Knowledge About Complementary and Alternative Medicine (T&CM) Practices Form," and "Attitude Scale Towards Traditional and Complementary Medicine."

Sociodemographic characteristics information form

This form consists of 15 questions (such as age, gender, class, faculty, etc.) to determine the participants' sociodemographic characteristics.

Level of knowledge about traditional and complementary medicine (t&cm) practices form

This form is designed to assess the participant's level of knowledge regarding complementary and alternative medicine practices. It includes 15 items related to different T&CM methods, and participants are asked to rate their knowledge level as "know well," "know a little," "aware of," "unaware of," or "don't know."

Attitude scale towards traditional and complementary medicine

The Comprehensive Attitude Scale Towards Complementary and Tradinational Medicine, developed by Hyland (4), has been validated in our country Erci et al.[6] The scale is a Likert-type scale consisting of a total of 11 items, and scores can range from a minimum of 11 to a maximum of 66. As the score on the scale decreases, the positive attitude towards complementary and alternative medicine increases.6 The reliability coefficient of the scale, Cronbach's alpha value is 0.72; for this study, Cronbach's alpha value was calculated as 0.93.

Statistical analysis

After the research, a power analysis was performed using the G*Power 3.1.9.2 software package. Number, percentage, and frequency were used for descriptive statistics. The normality of the data was examined using the Shapiro-Wilk test to determine whether the data followed a normal distribution. For data determined to follow a normal distribution, independent t-tests, Mann-Whitney U tests, one-way analysis of variance (ANOVA), and Kruskal-Wallis H tests were applied for two-group and more than two-group comparisons. The statistical analysis of the data was conducted using the Statistical Package for the Social Sciences (SPSS) version 25.0 software package, and a significance level of $p < 0.05$ was set.

Ethical statement

Approval was obtained from the Afyonkarahisar Health Sciences University Non-Interventional Clinical Research Ethics Committee (date: 04.11.2022, decision no: 2022/548) and the relevant departments' dean's offices.

RESULTS

A total of 1085 individuals participated in the study. Among the participants, 44.5% (n=483) were from the medical faculty, 19.4% (n=211) were from the dentistry faculty, 19.1% (n=207) were nursing students, and 17% (n=184) were physiotherapy and rehabilitation students. It was observed that 64.1% (n=695) of the participants were female, and 35.9% (n=390) were male. Regarding their academic year, 26.6% (n=289) were in the first year, 19.3% (n=209) were in the second year, 23% (n=250) were in the third year, 13.5% (n=146) were in the fourth year, 10.7% (n=116) were in the fifth year, and 6.9% (n=75) were in the sixth year (Table 1).

When asked about their aspirations in terms of specialization, 43.5% (n=472) of the students expressed their interest in surgical sciences, 26.1% (n=283) in internal medicine, 12.1% (n=131) in basic sciences, while 18.3% reported being undecided. Among the participants, 91.4% (n=992) stated that they chose their department willingly, while 8.6% (n=93) did not choose their department willingly (Table 1).

In terms of age distribution, 28.9% (n=314) of the students were aged 17-18, 45% (n=488) were aged 19-20, 21.8% (n=237) were aged 21-22, 2.8% (n=30) were aged 23-24, and 1.5% (n=16) were 25 years old or older. Regarding family structure, 74.6% (n=809) of the participants came from nuclear families, while 25.4% (n=276) came from extended families. In terms of income level, 19.7% (n=214) reported an income between 0-5000 TL, 20.9% (n=227) reported an income between 5001-8000 TL, and 59.4% (n=644) reported an income of 8001 TL and above. It was found that 93.5% (n=1015) of the participants did not have any chronic diseases, while 6.5% (n=70) reported having a chronic illness. Among those with chronic diseases, 1.2% (n=13) had allergic rhinitis, 1.6% (n=13) had asthma, 0.5% (n=5) had thyroid dysfunction, 0.6% (n=6) had reflux, 0.8% (n=9) had attention deficit hyperactivity disorder (ADHD), 0.6% (n=7) had rheumatic disease, 0.7% (n=8) had sinusitis, and 0.5% (n=5) had hypertension (Table 1). 31.4% of the students (n=341) stated that they had previously used the T&CM method, while 68.6% (n=744) mentioned that they had not used it. When asked about their beliefs regarding the use of T&CM, 39.4% of the participants (n=428) recommended its use, while 60.6% (n=657) did not recommend it. When asked about the factors influencing students' belief in T&CM, 39.7% (n=431) attributed it to personal experience, 17.5% (n=190) to scientific evidence, 5.8% (n=63) to university education, 19.8% (n=215) to cultural background, 10.7% (n=116) to T&CM training, and 6.5% (n=70) to media.

Regarding the sources of information about GETAT, 17.9% (n=194) mentioned TV, 3.5% mentioned newspapers, 3.2% (n=35) mentioned the internet, 17.3% (n=188) mentioned social media, 7.6% (n=82) mentioned family members or neighbors, 16.1% (n=175) mentioned doctors, 1.4% (n=15) mentioned medical school education, and 33% (n=358) said they had no knowledge and wished for it to be taught as a course (Table 1).

Among the faculties, the most well-known T&CM methods were reflexology (n=374, 34.5%), osteopathy (n=214, 19.7%), mesotherapy (n=204, 18.8%), hypnosis (n=203, 18.7%), cupping therapy (n=196, 18.1%), chiropractic (n=196, 18.1%), music therapy (n=194, 17.9%), apitherapy (n=188, 17.3%), phytotherapy (n=176, 16.2%), acupuncture (n=175, 16.1%), prolotherapy (n=172, 15.9%), ozone therapy (n=160, 14.7%), leech therapy (n=153, 14.1%), homeopathy (n=149, 13.7%), and maggot therapy (n=110, 10.1%) (Table 2).

The three most well-known T&CM methods among medical faculty students are cupping therapy (n=207, 29.8%), music therapy (n=117, 24.2%), and chiropractic (n=107, 22.2%). In the dentistry faculty, the three most commonly known T&CM methods among students are reflexology (n=162, 76.8%), acupuncture (n=47, 22.3%), and homeopathy (n=23, 10.4%). In contrast, 64% of students (n=135) stated that they were not familiar with osteopathy, and 64% (n=135) were not familiar with mesotherapy methods. Among nursing students in the faculty of health sciences, the most well-known T&CM methods are osteopathy (n=103, 49.8%), reflexology (n=93, 44.9%), and mesotherapy (n=89, 43%), while the least known method is phytotherapy (n=74, 35.7%). Among students in the physiotherapy and rehabilitation department of the faculty of health sciences, the most well-known T&CM methods are phytotherapy (n=69, 37.5%), hypnosis (n=59, 32.1%), and chiropractic (n=54, 29.3%). In contrast, the least known method is larval therapy (n=44, 23.9%) (Table 2).

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Table 1. Comparison of students' T&CMS score averages according to some sociodemographic characteristics

Variable	n	%	T&CMS*			Test (p)
Gender			**X**	**±**	**SS**	
Female	695	64.1	31.25	±	6.08	t= 0.01
Male	390	35.9	31.24	±	6.31	p= 0.98
Age						
17-18 age	314	28.9	30.28	±	4.43	
19-20 age	488	45	31.49	±	6.61	
21-22 age	237	21.8	32.52	±	7.19	
23-24 age	30	2.8	29.50	±	2.54	
25 age and above	16	1.5	27.06	±	4.13	
Income level						
0-5000 TL	214	19.7	33.78	±	5.37	F= 35.58
5001-8000 TL	227	20.9	32.25	±	6.87	p= 0.00
8001 TL and above	644	59.4	30.04	±	5.82	
Family type						
Nuclear family	809	74.6	30.67	±	6.62	t= 5.29
Large family	276	25.4	32.92	±	4.16	p= 0.00
Marital status						
Married	3	0.3	28.66	±	15.27	Z= 0.10
Single	1082	99.7	31.25	±	6.13	p= 0.91
Faculty						
Faculty of Medicine	483	44.5	26.78	±	5.39	
Faculty of Dentisty	211	19.4	30.88	±	1.67	F=430.6
Health Sciences-Nursing	207	19.1	36.94	±	2.62	p=0.00
Health Sciences-physiotherapy and rehabilitation	184	17	36.98	±	3.88	
Class						
1st Class	289	26.6	32.63	±	6.37	
2nd Class	209	19.3	31	±	5.85	
3rd Class	250	23	32.55	±	5.95	F= 29,24
4th Class	146	13.5	32.40	±	5.54	p= 0.00
5th Class	116	10.7	26.78	±	4.89	
6th Class	75	6.9	26.89	±	4.39	
Department preference						
Yes	992	91.4	31.53	±	6.04	t=5.10
No	93	8.6	28.16	±	6.62	P=0.00
Chronic Disease						
No	1015	93.5	31.19	±	6.19	F=1.382
Yes	70	6.5	32.08	±	5.74	P=0.24
If You Have Chronic Disease						
No	1015	93.5	31.38	±	6.17	
Allergic rhinitis	13	1.2	33.07	±	7.21	
Asthma	17	1.6	30.05	±	4.26	X^2= 24.83
Thyroid dysfunction	5	0.5	26.8	±	3.63	p= 0.00
Reflux	6	0.6	31.5	±	3.93	
Attention deficit hyperactivity disorder	9	0.8	30.44	±	6.2	
Rheumatic disease	7	0.6	26	±	5.97	
Sinusitis	8	0.7	26.12	±	4.54	
Hypertension	5	0.5	24.6	±	3.28	
T&CM belief						
Personal Experience	431	39.7	33.11	±	5.29	
Scientific Evidence	190	17.5	28.93	±	6.31	
Education at the University	63	5.8	26.98	±	5.49	F=31.19
Cultural background	215	19.8	30.41	±	6.62	P=0.00
T&CM trainings	116	10.7	33.77	±	5.72	
Media	70	6.5	28.21	±	4.43	
T&CM information resource						
TV	194	17.9	35.89	±	5.05	
Newspaper	38	3.5	25.6	±	4.51	
İnternet	35	3.2	29.74	±	6.14	
Social media	188	17.3	35.48	±	4.76	X^2= 395.9
Neighbors, neighbors	82	7.6	30.76	±	7.17	p= 0.00
Doctors	175	16.1	27.56	±	5.46	
Medical faculty education	15	1.4	30.4	±	2.02	
I have no information. I want it to be given as a course.	358	33	29.19	±	4.67	
Using T&CM before						
Yes	341	31.4	30.99	±	7.19	t=0.90
No	744	68.6	31.36	±	5.67	P=0.36
Suggesting the use of getat						
No	428	39.4	28.05	±	5.45	t=15.16
Yes	657	60.6	33.3	±	5.69	P=0.00
The branch you want to progress						
Surgical Sciences	472	43.5	34.5	±	4.79	
Internal Sciences	283	26.1	30.6	±	6.04	F=127.3
Basic Sciences	131	12.1	26.58	±	5.24	P= 0.00
None/I am undecided	199	18.3	27.51	±	5.39	

* T&CMS: Attitude Scale Towards Traditional and Complementary Medicine

In the past 30 years, there has been an increase in the use of Traditional and Complementary Medicine (T&CM) in developed and developing countries. In a study conducted among the adult population in Türkiye, the prevalence of complementary medicine practices was 60.5%.[7] In our study, 31.4% of the students reported using T&CM methods previously, while 68.6% stated that they had not used them. Among the participants, 60.6% recommended the use of T&CM methods, while 39.4% did not recommend their use.

A review of 26 studies evaluating medical undergraduate curricula examined the extent to which complementary and alternative medicine (CAM) was incorporated into the curriculum. It assessed the teaching, presentation, and evaluation approaches used. The review indicated inconsistencies in the curriculum, lack of defined graduate competencies, and the need for different research to determine whether CAM programs' design, content, and assessment affect clinical practice and/or patient outcomes.[8]

In a study conducted with students from Sakarya University Medical School, when asked about their sources of information on complementary medicine practices, 60.7% of the participants indicated their surroundings (family, relatives), 59.1% mentioned the Internet, 42.1% mentioned television, 9% mentioned healthcare professionals, and 5.9% mentioned school as their sources (7). In our study, when students were asked about the factors influencing their belief in T&CM, 39.7% mentioned personal experience, 17.5% mentioned scientific evidence, 5.8% mentioned education at the university, 19.8% mentioned cultural background, 10.7% mentioned T&CM training, and 6.5% mentioned media as influential factors. Our study results differ in this aspect. Furthermore, when asked about their sources of information on T&CM, 33% of the participants stated that they had no knowledge and expressed their desire to be taught as a course. This finding is consistent with the study conducted by Sonmez et al., where it was reported that students lacked sufficient knowledge about T&CM practices, obtained information from other sources, and desired its inclusion in the curriculum and its integration with modern medicine.[9]

A study was conducted to investigate the attitudes of dentistry faculty students towards traditional and complementary medicine (T&CM) methods, using various questionnaires, with a total of 243 volunteer students. The methods that the students were most familiar with were reported to be hirudotherapy-leeches (59.7%), acupuncture (56%), and cupping therapy (51%). The most commonly used methods were cupping therapy (8.2%), hirudotherapy-leeches (4.1%), and music therapy (4.1%). It was also noted that nobody used prolotherapy, apitherapy, and chiropractic methods.[10] In our study, the three most known T&CM methods among dentistry faculty students were reflexology (76.8%), acupuncture (22.3%), and homeopathy (10.4%). In contrast, 64% of the students were unaware of osteopathy and mesotherapy methods. In this aspect, our study differs.

In a study evaluating the attitudes of nursing students toward holistic complementary and alternative medicine, it was stated that 82.5% of the students used the Internet as a source of information. It was reported that they had previously used yoga (31.1%), meditation (25.7%), diet support (23.9%), music therapy (21.4%), and acupuncture (14.6%) methods. In comparison, they had not heard of or used chiropractic (91.8%), shiatsu (90.7%), bioresonance (85%), and homeopathy (77.5%) methods.[11] In our study, the most known TCM methods among nursing students in the health sciences faculty were osteopathy (49.8%), reflexology (44.9%), and mesotherapy (43%), while the least known method was phytotherapy (35.7%).

In a study investigating the usage of Complementary and Alternative Medicine (CAM) practices by patients attending the Physical Medicine and Rehabilitation clinic, it was reported that 63.6% of the patients had heard of CAM practices, and 17.8% had tried at least one of these practices. The most well-known CAM practices were acupuncture (74.7%), herbal therapy (73.3%), and cupping therapy (62.7%). The most commonly utilized CAM practices were cupping therapy (71.4%), herbal therapy (23.8%), and phytotherapy (19%).[12] In our study conducted with physiotherapy and rehabilitation department students from the health sciences faculty, the most well-known T&CM methods were phytotherapy (37.5%), hypnosis (32.1%), and chiropractic (29.3%). In comparison, the least known method was larval therapy (23.9%). It was observed that most of the existing studies have been conducted on patients, and there is a lack of studies focusing on the knowledge level of physiotherapy and rehabilitation department students. Thus, our study can be considered the first comparative study conducted between faculties in this regard.

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Table 2. Comparison of students' knowledge about T&CM methods according to faculties

	Medicine					Dentisty					Nursing					Physiotherapy And Rehabilitation					Total[a]	Total[b]
T&CM implementation	**A** **n** **(%)**	**B** **n** **(%)**	**C** **n** **(%)**	**D** **n** **(%)**	**E** **n** **(%)**	**A** **n** **(%)**	**B** **n** **(%)**	**C** **n** **(%)**	**D** **n** **(%)**	**E** **n** **(%)**	**A** **n** **(%)**	**B** **n** **(%)**	**C** **n** **(%)**	**D** **n** **(%)**	**E** **n** **(%)**	**A** **n** **(%)**	**B** **n** **(%)**	**C** **n** **(%)**	**D** **n** **(%)**	**E** **n** **(%)**	**n** **(%)**	**n** **(%)**
Acupuncture	97 20.1	258 53.4	108 22.4	20 4.1	-	47* 22.3	29 13.7	135 64	-	-	22 10.6	17 8.2	78 37.7	90 43.5	-	6 3.3	44 23.9	21 11.4	113 61.4	-	172 15.9	-
Apitherapy	51 10.6	131 27.1	122 25.3	179 37.1	-	17 8.1	8 3.8	129 61.1	57 27	-	83 40.1	101 48.8	-	21 10.1	2 1	37 20.1	44 23.9	6 3.3	60 32.6	37 20.1	188 17.3	39 3.6
Phytotherapy	65 13.5	190 39.3	147 30.4	81 16.8	-	6 2.8	154 73	45 21.3	6 2.8	-	36 17.4	30 14.5	-	67 32.4	74 35.7	69* 37.5	45 24.5	15 8.2	46 25	9 4.9	176 16.2	83 7.6
Hypnosis	84 17.4	183 37.9	154 31.9	62 12.8	-	17 8.1	28 13.3	29 13.7	137 64.9	-	43 20.8	106 51.2	8 3.9	49 23.7	1 0.5	59* 32.1	53 28.8	-	72 39.1	-	203 18.7	1 0.1
Leech Treatment	66 13.7	192 39.8	159 32.9	66 13.7	-	6 2.8	162 76.8	29 13.7	14 6.6	-	62 30	112 54.1	-	15 7.2	18 8.7	19 10.3	66 35.9	10 5.4	66 35.9	23 12.5	153 14.1	41 3.8
Homeopathy	64 13.3	125 25.9	112 23.2	182 37.7	-	129* 61.1	22 10.4	46 21.8	14 6.6	-	28 13.5	109 52.7	15 7.2	16 7.7	39 18.8	35 19	76 41.3	5 2.7	68 37	-	149 13.7	39 3.6
Kayropraktic	107* 22.2	192 39.8	112 23.2	72 14.9	-	6 2.8	30 14.2	40 19	135 64	-	29 14	50 24.2	2 1	125 60.4	1 0.5	54* 29.3	29 15.8	23 12.5	78 42.4	-	196 18.1	1 0.1
Mug Treatment	144* 29.8	207 42.9	93 19.3	39 8.1	-	11 5.2	29 13.7	171 81	-	-	16 7.7	108 52.2	1 0.5	15 7.2	67 32.4	25 13.6	47 25.5	16 8.7	57 31	39 21.2	196 18.1	106 9.8
Larva Treatment	40 8.3	115 23.8	153 31.7	175 36.2	-	23 10.9	30 14.2	29 13.7	129 61.1	-	23 11.1	44 21.3	1 0.5	119 57.5	20 9.7	24 13	40 21.7	-	76 41.3	44 23.9	110 10.1	64 5.9
Mesotherapy	59 12.2	132 27.3	128 26.5	164 34	-	11 5.2	6 2.8	14 6.6	45 21.3	135 64	89* 43	19 9.2	15 7.2	84 40.6	-	45 24.5	11 6	5 2.7	123 66.8	-	204 18.8	135 12.4
Prolotherapy	24 5	77 15.9	126 26.1	256 53	-	23 10.9	22 10.4	14 6.6	23 10.9	129 61.1	80 38.6	82 39.6	2 1	42 20.3	1 0.5	48 26.1	21 11.4	10 5.4	100 54.3	5 2.7	175 16.1	135 12.4
Osteopathy	40 8.3	98 20.3	160 33.1	185 38.3	-	17 8.1	22 10.4	14 6.6	23 10.9	135 64	103* 49.8	16 7.7	2 1	86 41.5	-	54 29.3	14 7.6	13 7.1	98 53.3	5 2.7	214 19.7	140 12.9
Ozone Treatment	78 16.1	129 26.7	157 32.5	119 24.6	-	11 5.2	30 14.2	29 13.7	141 66.8	-	34 16.4	52 25.1	9 4.3	74 35.7	38 18.4	37 20.1	69 37.5	8 4.3	65 35.3	5 2.7	160 14.7	43 4
Reflexology	71 14.7	133 27.5	155 32.1	124 25.7	-	162* 76.8	14 6.6	29 13.7	6 2.8	-	93* 44.9	88 42.5	9 4.3	17 8.2	-	48 26.1	57 31	44 23.9	21 11.4	14 7.6	374 34.5	14 1.3
Music Therapy	117* 24.2	194 40.2	127 26.3	45 9.3	-	17 8.1	36 17.1	23 10.9	135 64	-	36 17.4	105 50.7	5 2.4	14 6.8	47 22.7	24 13	54 29.3	11 6	81 44	14 7.6	194 17.9	61 5.6

DISCUSSION

In the past 30 years, there has been an increase in the use of Traditional and Complementary Medicine (T&CM) in developed and developing countries. In a study conducted among the adult population in Türkiye, the prevalence of complementary medicine practices was 60.5%.[7] In our study, 31.4% of the students reported using T&CM methods previously, while 68.6% stated that they had not used them. Among the participants, 60.6% recommended the use of T&CM methods, while 39.4% did not recommend their use.

A review of 26 studies evaluating medical undergraduate curricula examined the extent to which complementary and alternative medicine (CAM) was incorporated into the curriculum. It assessed the teaching, presentation, and evaluation approaches used. The review indicated inconsistencies in the curriculum, lack of defined graduate competencies, and the need for different research to determine whether CAM programs' design, content, and assessment affect clinical practice and/or patient outcomes.[8]

In a study conducted with students from Sakarya University Medical School, when asked about their sources of information on complementary medicine practices, 60.7% of the participants indicated their surroundings (family, relatives), 59.1% mentioned the Internet, 42.1% mentioned television, 9% mentioned healthcare professionals, and 5.9% mentioned school as their sources (7). In our study, when students were asked about the factors influencing their belief in T&CM, 39.7% mentioned personal experience, 17.5% mentioned scientific evidence, 5.8% mentioned education at the university, 19.8% mentioned cultural background, 10.7% mentioned T&CM training, and 6.5% mentioned media as influential factors. Our study results differ in this aspect. Furthermore, when asked about their sources of information on T&CM, 33% of the participants stated that they had no knowledge and expressed their desire to be taught as a course. This finding is consistent with the study conducted by Sonmez et al., where it was reported that students lacked sufficient knowledge about T&CM practices, obtained information from other sources, and desired its inclusion in the curriculum and its integration with modern medicine.[9]

A study was conducted to investigate the attitudes of dentistry faculty students towards traditional and complementary medicine (T&CM) methods, using various questionnaires, with a total of 243 volunteer students. The methods that the students were most familiar with were reported to be hirudotherapy-leeches (59.7%), acupuncture (56%), and cupping therapy (51%). The most commonly used methods were cupping therapy (8.2%), hirudotherapy-leeches (4.1%), and music therapy (4.1%). It was also noted that nobody used prolotherapy, apitherapy, and chiropractic methods.[10] In our study, the three most known T&CM methods among dentistry faculty students were reflexology (76.8%), acupuncture (22.3%), and homeopathy (10.4%). In contrast, 64% of the students were unaware of osteopathy and mesotherapy methods. In this aspect, our study differs. In a study evaluating the attitudes of nursing students toward holistic complementary and alternative medicine, it was stated that 82.5% of the students used the Internet as a source of information. It was reported that they had previously used yoga (31.1%), meditation (25.7%), diet support (23.9%), music therapy (21.4%), and acupuncture (14.6%) methods. In comparison, they had not heard of or used chiropractic (91.8%), shiatsu (90.7%), bioresonance (85%), and homeopathy (77.5%) methods.[11] In our study, the most known TCM methods among nursing students in the health sciences faculty were osteopathy (49.8%), reflexology (44.9%), and mesotherapy (43%), while the least known method was phytotherapy (35.7%).

In a study investigating the usage of Complementary and Alternative Medicine (CAM) practices by patients attending the Physical Medicine and Rehabilitation clinic, it was reported that 63.6% of the patients had heard of CAM practices, and 17.8% had tried at least one of these practices. The most well-known CAM practices were acupuncture (74.7%), herbal therapy (73.3%), and cupping therapy (62.7%). The most commonly utilized CAM practices were cupping therapy (71.4%), herbal therapy (23.8%), and phytotherapy (19%).[12] In our study conducted with physiotherapy and rehabilitation department students from the health sciences faculty, the most well-known T&CM methods were phytotherapy (37.5%), hypnosis (32.1%), and chiropractic (29.3%). In comparison, the least known method was larval therapy (23.9%). It was observed that most of the existing studies have been conducted on patients, and there is a lack of studies focusing on the knowledge level of physiotherapy and rehabilitation department students. Thus, our study can be considered the first comparative study conducted between faculties in this regard.

CONCLUSION

The cross-sectional design of our research, being conducted only with students from a single university, measuring attitudes towards T&CM solely with questions included in a scale, and the inability to access detailed information about the participants' knowledge regarding T&CM can be mentioned as the main limitations of this research. However, unlike previous studies, this research stands out by evaluating the attitudes toward T&CM of students from multiple faculties, which represents a strength of this study.

Based on the findings obtained in our study, it has been observed that students in the faculties of medicine and dentistry, as well as in the nursing and physiotherapy and rehabilitation departments of the faculty of health sciences, have a positive attitude toward T&CM applications but lack sufficient knowledge. Revisions to the current educational curriculum and training on T&CM applications will contribute significantly to guiding patients and their families in the integrated and proper use of these applications in conjunction with modern medicine for future healthcare professionals.

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