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The Impact of COVID-19 Pandemic on Patients' Attitudes Towards Traditional and Complementary Medicine: A Cross-Sectional Study

COVID-19 Pandemisinin Hastaların Geleneksel ve Tamamlayıcı Tıbba Yönelik Tutumlarına Etkisi: Kesitsel Bir Çalışma

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ABSTRACT Objective: Our study aims to examine whether patients' perspectives on traditional and complementary medicine (T&CM) are affected by the coronavirus disease-2019 (COVID-19) pandemic. Material and Methods: Our study is cross-sectional descriptive. The population consists of patients aged 18 years and older who applied to the family medicine outpatient clinic of a university hospital between January 2022 and June 2022. Healthcare workers were excluded from the study to avoid medical bias. A sociodemographic questionnaire consisting of 18 items and a T&CM Attitude Scale consisting of 27 items prepared by McFadden et al. were administered to the participants. A pilot study was conducted with 38 people. According to the pilot study results, the sample calculation was made, and the study was carried out with 450 people. Results: Post-COVID-19 scores were significantly higher in the T&CM Attitude Scale total score and in the sub-dimensions of "view of traditional medicine", "dissatisfaction with modern medicine", and "holistic view of health" (p<0.001). The increase in the total score on the T&CM Attitude Scale was more evident in those who had used any T&CM method before, in those whose family members had used the T&CM method, and in those who found T&CM methods useful (all p<0.001). There was no significant difference in the total score between those with COVID-19 infection and those without (p=0.215). Conclusion: The view for T&CM was found to increase positively after the COVID-19 pandemic, and this positive outlook was independent of being infected with COVID-19.

ÖZET Amaç: Çalışmamız, hastaların geleneksel ve tamamlayıcı tıbba (GETAT) bakış açılarının koronavirüs hastalığı-2019 [coronavirus disease-2019 (COVID-19)] pandemisinden etkilenip etkilenmediğini incelemeyi amaçlamaktadır. Gereç ve Yöntemler: Çalışmamız kesitsel tanımlayıcı tipte bir çalışmadır. Çalışmanın evrenini bir üniversite hastanesinin aile hekimliği polikliniğine Ocak-Haziran 2022 tarihleri arasında başvuran 18 yaş ve üzeri hastalar oluşturmaktadır. Tıbbi yanlılığı önlemek için sağlık çalışanları çalışmaya dâhil edilmemiştir. Katılımcılara McFadden ve ark. tarafından geliştirilen ve 27 maddeden oluşan GETAT Tutum Ölçeği ve araştırmacılar tarafından hazırlanmış 18 maddelik bir sosyodemografik anket uygulanmıştır. Otuz sekiz kişi ile pilot çalışma gerçekleştirilmiş ve pilot çalışmanın sonuçlarına göre örneklem hesabı yapılarak ve 450 kişi ile çalışma tamamlanmıştır. Bulgular: GETAT Tutum Ölçeği toplam puan ve "geleneksel tıbba bakış", "modern tıbba karşı memnuniyetsizlik" ve "sağlığa bütüncül bakış" alt boyutlarında COVID-19 pandemisi sonrası puanlar COVID-19 pandemisi öncesine göre anlamlı derecede daha yüksekti (p<0,001). Daha önce herhangi bir GETAT yöntemi kullanmış olanlarda, ailesinden birisi GETAT yöntemi kullanmış olanlarda ve GETAT yöntemlerini faydalı bulanlarda GETAT Tutum Ölçeği'nden alınan toplam puan artışı daha belirgindi (hepsi p<0,001). COVID-19 enfeksiyonu geçirenlerle geçirmeyenler arasında toplam puan açısından anlamlı fark yoktu (p=0,215). Sonuc: Hastaların GETAT tutumlarının COVID-19 pandemisi sonrasında pozitif olarak arttığı görülmüştür ve bu olumlu artış COVID-19 enfeksiyonu geçirmekten bağımsızdır.

Keywords: Traditional medicine; complementary medicine; COVID-19 Anahtar Kelimeler: Geleneksel tıp; tamamlayıcı tıp; COVID-19

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The coronavirus disease-2019 (COVID-19) pandemic has posed unprecedented challenges for the global health system and the public health response.¹ As the virus spreads and affects millions of lives, people have sought various ways to cope with the health risks and uncertainties associated with the pandemic. One of these ways is using traditional and complementary medicine (T&CM) methods, often perceived as harmless, accessible and natural alternatives or supplements to conventional medicine.^{2,3} T&CM encompasses a diverse range of health practices, products and therapies not part of the mainstream medical system, such as herbal medicine, acupuncture, homoeopathy, cupping therapy, leech therapy, yoga, and meditation.⁴ Gaining a deeper understanding of the prevalence, patterns, and implications of T&CM usage during and in the aftermath of the COVID-19 pandemic is crucial from both individual and public health standpoints.

T&CM has been widely used for health promotion, disease prevention and treatment support in many countries and cultures for centuries.^{5,6} However, the COVID-19 pandemic has increased the demand and popularity of T&CM among the general public, as well as the attention and interest of researchers, policymakers and health professionals.⁷ On the one hand, this may reflect the potential benefits of T&CM for enhancing immune function, reducing stress and anxiety, improving quality of life and alleviating symptoms of COVID-19 or its complications. On the other hand, this indicates the limitations and challenges of conventional medicine in addressing the complex and evolving needs of patients and communities during the pandemic. Moreover, some people may resort to T&CM as a substitute for conventional medicine rather than a complement due to mistrust, misinformation or lack of access to evidence-based medical care.5

On the patient's side, the fact that they are more distant, especially to new medical treatments, may bring them closer to T&CM applications. It is a matter of curiosity how the COVID-19 pandemic, which has challenged the health systems of all countries and introduced many experimental treatments, affects how patients view modern medicine and T&CM. Our study aims to question patients' thoughts towards T&CM, modern medicine and holistic medicine and to what extent these thoughts have changed due to COVID-19.

MATERIAL AND METHODS

STUDY DESIGN

Our research is cross-sectional descriptive.

PARTICIPANTS

The study population consists of individuals over 18 who visited the Erzincan Binali Yıldırım University Training and Research Hospital Family Medicine outpatient clinic for any reason between January 2022 and June 2022. Individuals who met the following criteria were included in the study: aged 18 or older, voluntarily agreed to participate, and able to speak Turkish. While no upper age limit was set for the study, individuals lacking the cognitive level necessary to comprehend and respond to the study questions were excluded. Also, healthcare workers were excluded from the study to avoid medical bias.

ETHICAL CONSIDERATIONS

Ethics committee approval was obtained for the study from the Clinical Research Ethics Committee of Erzincan Binali Yıldırım University Faculty of Medicine on December 7, 2021, with the number 128241. In addition, a work permit was obtained from the hospital where the study will be conducted. All procedures followed the ethical standards of this committee for human experimentation and the principles of the revised Declaration of Helsinki. Written and verbal informed consent was obtained from all participants.

SAMPLE SIZE

Since no similar studies were found in the literature, a pilot study was planned to calculate the sample size and finalize the demographic data questionnaire. A medium effect size of 0.5 (Cohen's d=0.5) and a power of 80% were assumed for the sample size calculation. A total of 38 people participated in the pilot study, considering a 10% data loss from the initial sample of 34 people. The demographic data questionnaire was finalized based on the pilot study results. During the pilot study, the questions of the T&CM Attitude Scale were asked to the patients in pairs: "How many points would you give before COVID-19?" and "How many points would you give now?". Using the mean scores and standard deviations (SD) before and after the COVID-19 pandemic obtained from the pilot study, the sample size required for the main study was calculated with a power of 80%, a Type 1 error rate of 0.05, and an effect size of 0.135. The calculated sample size was 450.

DATA COLLECTION TOOLS

The participants were administered the Complementary, Alternative, and Conventional Medicine Attitude Scale (CACMAS) and an 18-item survey, which was designed by the researchers after reviewing the literature. This survey inquired about participants' sociodemographic characteristics, knowledge level regarding T&CM, and usage of T&CM practices. The CACMAS, a 27-item scale, was originally developed by McFadden et al.⁸ The Turkish validity and reliability of the scale were established by Köse et al. in 2010.⁹

The CACMAS is in the form of a 7-point Likert (1: Strongly disagree, 7: Totally agree) and no cutoff value. There are items with positive and negative scores on the scale, and an increase in the score is interpreted as an increase in the positive attitude towards T&CM applications. Each item on the scale was asked, "How many points would you give before the COVID-19 pandemic?" and "How many points would you give now?". For this reason, each item can receive at least "1" point and at most "7" points in 2 different sections: before COVID-19 and after COVID-19.

The scale has 3 subscales. These are intellectual perspectives on complementary medicine, dissatisfaction with modern medicine and holistic view of health. Distribution of the sub-dimension items of the scale, "intellectual perspective on complementary medicine" (18, 19, 21, 22, 24, 5, 7, 9th items), "dissatisfaction with modern medicine" (1, 4, 16, 14, 11, 17, 26, 27, 20, 8th items) and "holistic view to health" (3, 10, 12, 13, 15, 23, 25, 2, 6th items).

STATISTICAL ANALYSIS

The data were analyzed by entering the IBM SPSS 25.0 software package (SPSS Inc., Chicago, IL,

USA) program. The normality assumption was assessed using the Kolmogorov-Smirnov test. Descriptive analyses were presented as mean±SD for normally distributed variables, median and range (minimum-maximum) for non-normally distributed variables, and as the number of cases (n) and percentages (%) for nominal variables. To evaluate the mean differences between the 2 dependent groups, the paired sample t-test (two-tailed) was employed. For comparing specific effects between 2 independent groups, the Student's t-test was utilized. The chisquare test was applied to assess the independence and relationship of categorical variables. Statistical significance was taken as p<0.05.

RESULTS

Four hundred fifty people were included in our study. Of the participants, 225 (50%) were female, and 225 (50%) were male, with a mean age of 44.84 ± 18.95 (minimum=18, maximum=84). The demographic data of the participants are given in Table 1.

While the rate of those who thought the T&CM methods were beneficial was 71.1% (n=320), the rate of those who suggested the T&CM method to some-one else was 26% (n=117).

TABLE 1: Demographic data of the participants.					
		n	%		
Educational status	Illiterate	13	2.9		
	Literate	18	4		
	Primary-secondary school	180	40		
	High school	111	24.7		
	University	128	28.4		
Living place	City centre	366	81.3		
	District centre	65	4.4		
	Village-town etc.	19	4.2		
Chronic disease status	No	261	58		
	Yes	189	42		
Drug use	No	254	56.4		
	Yes	196	43.6		
COVID-19 pass status	No	293	65.1		
	Yes	157	34.9		
Previously using T&CM	No	362	80.4		
	Yes	88	19.6		
T&CM usage status of	No	369	82		
family members	Yes	81	18		

T&CM: Traditional and complementary medicine.

The post-COVID-19 value of 26 items on the scale was higher than the pre-COVID-19 value, and the post-COVID-19 value in only one item was lower than the pre-COVID-19 value. The mean value of the second item (the human body can essentially heal itself, and healthcare providers must help this healing process) before COVID-19 was 3.82 ± 1.986 , while the mean value after COVID-19 was 3.61 ± 2.150 (p=0.002). The mean scores given to the scale items before and after COVID-19 are in the table (Table 2).

The item with the lowest difference between the post-COVID-19 mean score and the pre-COVID-19 mean score is item 14, with a difference of 0.01 points (Item 14: "The last time I saw a medical doc-

tor, he or she did not understand my problem"). The item with the highest difference is item 16 (Item 16: "I found it difficult to talk to my medical doctor the last time I saw him or her") (p<0.001).

The mean scores of all sub-dimensions of the scale and the total score increased significantly after COVID-19 compared to before (all p<0.001) (Table 3).

Differences in scores given to the CACMAS scale items before and after COVID-19, in relation to gender, having contracted the COVID-19 infection, being vaccinated for COVID-19, having a chronic illness, prior use of T&CM, family use of T&CM methods, and the belief in the benefits of T&CM methods, are presented in Table 4.

	Mean Before COVID-19	Mean After COVID-19	р
Item 1R** (The last time I went to see a medical doctor, I was delighted with the care I received)	4.79±1.857	5.0±2.027	0.001
Item 2 (The body is essentially self-healing, and the task of a health care provider is to assist in the healing process)	3.82±1.986	3.61±2.150	0.002
Item 3 (The health of my body, mind, and spirit are related, and whoever cares for my health should take that into account)	4.37±1.887	4.60±1.968	p<0.001
tem 4R** (The last time I had important questions about my health care and I asked a medical doctor about them, I understood the answer	4.29±1.881	4.53±1.974	p<0.00
tem 5 (I have a more equal relationship with my complementary practitioner than with my doctor)	3.04±1.925	3.30±2.262	p<0.00
tem 6 (Effects of complementary therapies are usually the result of a placebo effect)	3.45±1.859	3.46±2.064	0.855
Item 7 (I feel that complementary treatment is a more natural form of healing than orthodox medicine)	3.10±1.909	3.54±2.237	p<0.00
Item 8R** (I have a lot of confidence in the medical doctor I see most often for my health care)	4.74±1.949	4.96±2.046	p<0.00
Item 9R** (Complementary therapies are a threat to public health)	2.74±1.948	2.84±2.134	0.156
tem 10 (An underlying energy or vital force maintains physical and mental health)	4.16±1.935	4.46±2.032	p<0.00
tem 11 (I don't trust doctors and hospitals, so I use them as little as possible)	2.09±1.525	2.22±1.686	0.018
tem 12 (A patient's symptoms should be regarded as a manifestation of a general imbalance or dysfunction affecting the whole body)	4.36±1.749	4.61±1.891	p<0.00
tem 13 (Health and disease are a reflection of the balance between positive life-enhancing forces and negative, destructive forces)	4.52±1.714	4.66±1.914	0.005
tem 14 (The last time I saw a medical doctor, he or she did not understand my problem)	2.66±1.726	2.69±1.877	0.585
tem 15 (A patient's expectations, health beliefs, and values should be integrated into the patient care process)	3.84±1.986	4.26±2.175	p<0.00
tem 16 (I found it difficult to talk to my medical doctor the last time I saw him or her)	2.65±1.691	3.53±2.163	p<0.00
tem 17 (I am often concerned that orthodox medical treatments recommended by my doctor will be associated with negative side effects)	2.74±1.767	3.20±2.117	p<0.00
tem 18 (I feel so relaxed after complementary treatment sessions)	1.38±2.23	1.49±2.413	0.001
tem 19 (I believe that complementary medicine enables me to take a more active part in maintaining my health)	1.23±1.994	1.33±2.217	0.006
tem 20 (I prefer to deal with my health issues myself)	3.32±1.773	3.40±2.048	0.293
tem 21 (Most complementary therapies stimulate the body's natural therapeutic powers)	3.69±1.665	3.83±1.849	0.010
tem 22 (Complementary therapies include ideas and methods from which conventional medicine could benefit)	4.16±2.007	4.44±2.195	0.004
tem 23 (Treatments not tested in a scientifically recognized manner should be discouraged)	4.38±2.179	4.74±2.256	p<0.00
tem 24 (I believe complementary therapy will be more effective for maintaining my health than orthodox medicine)	3.09±2.001	3.24±2.236	0.013
tem 25 (I value an emphasis on treating the whole person)	5.05±1.910	5.38±1.943	p<0.00
Item 26R** (The last time I saw a medical doctor the treatment I received was effective in treating/curing my ailment)	4.66±1.957	4.94±2.078	p<0.00
tem 27 (The last time I saw a medical doctor, he or she did not give me enough time)	2.54±1.701	3.17±2.047	p<0.00

*Paired sample t-test; **R: These are reverse scored items and score calculations were made accordingly; CACMAS: Complementary, Alternative, and Conventional Medicine Attitude Scale.

TABLE 3: Comparison of the mean scores of the CACMAS scale sub-dimensions and total scores before and after COVID-19.				
	Mean Before COVID-19	Mean After COVID-19	p*	
Intellectual perspective on complementary medicine	24.96±8.91	26.37±10.552	< 0.001	
Dissatisfaction with modern medicine	29.52±8.374	30.78±10.366	<0.001	
Holistic view of health	37.39±8.620	39.79±8.877	<0.001	
Total score	92.44±16.26	97.07±20.27	<0.001	

*Paired sample t-test; CACMAS: Complementary, Alternative, and Conventional Medicine Attitude Scale.

		IPCM Difference	p value (IPCM)	DMM Difference	p value (DMM)	HVH Difference	p value (HVH)	Total score difference	p value
Gender	Female	1.36±3.70	0.788	0.66±6.61	0.003	1.79±4.37	0.826	3.80±8.99	0.065
	Male	1.78±6.14		1.86±6.90		1.88±4.02		5.48±11.84	
Contracting COVID-19 infection	No	1.38±4.29	0.802	1.19±6.58	0.665	1.63±4.15	0.100	4.16±9.82	0.215
	Yes	1.92±6.27		1.39±7.13		2.22±4.25		5.54±11.766	
Getting COVID-19 vaccine	No	2.75±3.86	0.080	4.06±5.40	0.003	2.56±3.88	0.119	9.38±9.87	0.004
	Yes	1.48±5.14		1.05±6.82		1.78±4.21		4.28±10.52	
Having a chronic illness	No	1.69±4.34	0.165	1.34±6.63	0.673	1.87±4.46	0.809	4.87±10.73	0.665
	Yes	1.40±5.94		1.14±6.98		1.79±3.80		4.32±10.31	
Using T&CM previously	No	0.96±5.00	<0.001	0.64±6.62	<0.001	1.90±4.20	0.924	3.48±10.55	<0.001
	Yes	4.06±4.61		3.80±6.83		1.57±4.16		9.42±9.13	
Use of T&CM in the family	No	1.15±5.12	<0.001	0.62±6.69	<0.001	1.94±4.30	0.330	3.68±10.94	<0.001
	Yes	3.47±4.37		4.17±6.40		1.36±3.65		9.00±9.71	
Thinking that T&CM methods	No	0.44±3.43	<0.001	0.05±6.80	0.140	1.97±4.35	0.650	1.58±9.57	<0.001
are useful	Yes	2.38±5.40		1.75±6.71		1.78±4.13		5.88±10.69	

CACMAS: Complementary, Alternative, and Conventional Medicine Attitude Scale; IPCM: Intellectual perspective on complementary medicine; DMM: Dissatisfaction with modern medicine; HVH: Holistic view of health; T&CM: Traditional and complementary medicine.

No significant correlation was found between having COVID-19 and whether or not T&CM methods are useful (p=0.938).

DISCUSSION

Our study examined whether people's interest in T&CM applications increased for various reasons after the COVID-19 outbreak. Our study observed that the average scores of all sub-dimensions of the CACMAS and the total score increased in the post-COVID-19 period compared to the pre-COVID-19 period, and the positive view on T&CM applications increased. Accordingly, it can be said that interest in T&CM applications has increased after the COVID-19 pandemic.

T&CM methods are an important and often overlooked health resource with many applications in preventing and managing lifestyle-related chronic diseases and meeting the health needs of ageing populations.⁴ In our study, the rate of those who think that T&CM methods are beneficial was 71.1%. In a study conducted by Teke et al. during the pandemic in our country, it was determined that 45.5% of the participants used T&CM.¹⁰ The reason for the entirely different statistics may be that Teke et al. conducted the study on physicians. Health workers were not included in our study because it may cause prejudice. Physicians may have moved away from traditional medicine because they work in modern medicine. Different results may be obtained when the same study is performed with physicians in the T&CM unit. This shows a generally high interest in T&CM methods, but different among health professionals.

We found that the mean score of only a single item on the CACMAS scale decreased in the post-COVID-19 period. The second item of the CACMAS scale reflects the belief that the human body can heal itself and that healthcare providers should facilitate this healing process. This belief is consistent with the holistic view of health that underlies many T&CM methods, which emphasize the self-regulation and self-healing capacities of the body. This suggests that the participants had less confidence in their body's ability to heal after the pandemic. This may be due to the increased awareness and fear of the severity and unpredictability of COVID-19, as well as the limitations of both conventional and T&CM methods in preventing or curing the infection. Alternatively, this may reflect a shift in the participants' preference for more active and evidence-based interventions over passive and naturalistic ones during the pandemic.

The item with the lowest difference between the post-COVID-19 mean score and the pre-COVID-19 mean score was item 14, with a difference of 0.01 points. This item reflects the perception that the medical doctor did not understand the patient's problem during the last visit. This finding suggests that the COVID-19 pandemic did not significantly affect patient-doctor communication or patient satisfaction with the doctor's understanding. This may be due to the increased use of teleconsultations during the pandemic, which may have facilitated more practical and convenient communication between patients and doctors.^{11,12} Alternatively, this may reflect the high level of trust and confidence that patients have in their doctors, regardless of the mode or frequency of consultation.¹³ However, further research is needed to explore the factors influencing patient-doctor communication and patient satisfaction during and after the pandemic.

One of the items that showed the highest difference between the post-COVID-19 and pre-COVID-19 mean scores was item 16, which stated, "I found it difficult to talk to my medical doctor the last time I saw him or her". The difference was 0.88 points, and it was statistically significant. This increase in the post-COVID-19 mean score may reflect patients' challenges in accessing and communicating with their physicians during the pandemic. Some possible factors contributing to this situation are the difficulty of finding an appointment for an examination, the high patient density of tertiary care institutions, the decrease in physicians due to resignations after COVID-19, and the exponential increase in patient demand. These findings suggest that patients' satisfaction and trust in their physicians declined during the COVID-19 pandemic. Similar results have been reported in other studies that assessed patient satisfaction and associated factors during the pandemic.^{13,14} Therefore, exploring ways to improve patient-provider communication and relationships in the context of telemedicine and infection control measures is essential.

Our study compared patients' attitudes towards T&CM before and after COVID-19 infection. We found that the post-COVID-19 total score average in the dimensions of the total score, philosophical view towards T&CM, dissatisfaction with modern medicine and holistic view of health increased compared to pre-COVID-19. This shows that patients' attitude towards T&CM post-COVID-19 is more positive than pre-COVID-19. One possible explanation is that the media's criticism of modern medicine and vaccines has influenced patients' perceptions and preferences. Another possible explanation is that patients have sought alternative ways to cope with the physical and psychological effects of COVID-19, such as stress, anxiety, pain, and inflammation.^{15,16} Previous studies have shown that some T&CM interventions, such as acupuncture, traditional Chinese medicine, relaxation, and Qigong, can improve various symptoms and quality of life in COVID-19 patients.^{16,17} Therefore, it is essential to understand the reasons and motivations behind patients' use of T&CM during the pandemic and to evaluate the safety and effectiveness of these interventions.

The mean score in the "total score" and "dissatisfaction with modern medicine" sub-score dimensions of those not vaccinated against COVID-19 was statistically higher. It is seen that those who are not vaccinated prefer these methods by moving away from science-based medicine and are getting closer to traditional medicine. It comes to mind that vaccine criticisms, which are frequently on the agenda after COVID-19, may also have caused this situation. In this period, false and unfounded information was transferred directly to the other party without filtering. The results show that individuals with question marks resort to these methods and avoid modern medicine.

The post-COVID-19 mean score in all subdimensions of those who used and did not use any of the T&CM applications before was found to be increased compared to pre-COVID-19. A statistically significant difference was found between the groups. The opinions of those who use T&CM have changed much more. This suggests that individuals using T&CM benefit from these methods and move away from modern medicine.

In our study, the rate of using the T&CM method is higher in those with chronic diseases. However, no statistically significant difference was found between the groups. In the study of Göktaş, the use of T&CM is higher in patients with chronic diseases.¹⁸ Because after the COVID-19 pandemic, those with no disease resort to these methods and apply T&CM methods for treatment, aesthetics and protection. Therefore, no significant difference was found between the groups.

There was no significant difference between the answers from the groups who had COVID-19 and those who did not to the question "Do you think the T&CM method is useful?". In both groups, the majority result was "yes". The COVID-19 pandemic has affected all humanity and driven everyone to seek health. Due to this, all individuals with and without COVID-19 have started to sympathize with traditional medicine methods and think they are beneficial.

STUDY LIMITATIONS

Our study has some limitations. While answering the questionnaires, the participants were asked to remember the pre-COVID-19 situation. The degree of recall is debatable. In addition, since the study was conducted in a tertiary hospital, the groups may need to be more homogeneously distributed. There is a need for similar studies to be carried out in different places and centres, including primary care.

On the other hand, prior to our study, a pilot study was conducted with 38 people; some questionnaire questions were changed during this study, some questions were removed, and a more useful and practical data collection questionnaire was created. According to the result of the pilot study, the sample calculation was made, and 450 people walked. Our sample size is better than similar studies. The scale used is a valid and reliable scale in Turkish.

CONCLUSION

As a result, our study highlights a more positive stance towards T&CM in the wake of the COVID-19 pandemic. Notably, this positive change was consistent regardless of the person's direct experience of COVID-19 infection. This may have happened because of the search for alternative, holistic health solutions. Further research could investigate the factors underlying this change, and healthcare managers could provide patients with comprehensive support for changing attitudes.

Source of Finance

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

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Ersan Gürsoy, Bilal Karabaş; Design: Ersan Gürsoy, Bilal Karabaş; Control/Supervision: Ersan Gürsoy; Data Collection and/or Processing: Bilal Karabaş; Analysis and/or Interpretation: Ersan Gürsoy; Literature Review: Bilal Karabaş; Writing the Article: Ersan Gürsoy, Bilal Karabaş; Critical Review: Ersan Gürsoy; References and Fundings: Bilal Karabaş, Ersan Gürsoy; Materials: Bilal Karabaş, Ersan Gürsoy.

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