

Research Article

Traditional and complementary medicine perspectives of family physicians in Istanbul İstanbul'daki aile hekimlerinin geleneksel ve tamamlayıcı tıp bakış açıları

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Abstract

Introduction: The World Health Organization, within the scope of the Traditional Medicine Strategy for 2014-2023, recommends the development of integrated health policies, particularly in the area of primary healthcare. However, family physicians often report feeling insufficiently trained to effectively integrate these practices into patient care. This study aims to assess the views, understanding, and experiences of family physicians regarding the utilization of Traditional & Complementary Medicine (T&CM).

Methods: The family physicians employed by the Istanbul Health Directorate Public Health Services were solicited to participate in an 18-question online survey to assess their level of education in T&CM methods, their views on integration of T&CM into family medicine, and the impact of these practices on patient care.

Results: A total of 324 family physicians took part in the survey; 12.0% were specialists, 64.5% had worked in primary care for over 10 years, and 59.6% were in the age range of 31-50 years. Among the physicians, the majority (70.1%) reported a preference for integrating T&CM practices with conventional medicine (ConvM). The majority of the participants (71.6%) had no formal T&CM training, and 66.4% reported inquiring about T&CM in their patient consultations. Over half of the physicians (56.79%) believed that T&CM methods should be used in preventive medicine. The most widely recognized T&CM technique was cupping therapy (18.5%), which was also the most frequently recommended method by physicians.

Conclusion: Most of the family physicians who participated in the study expressed a desire for integrative medicine, despite acknowledging limited formal education in this field. Offering physicians training in evidence-based complementary medicine therapies could provide them with additional non-invasive treatment options. However, patients' diffidence to inform their family physicians about T&CM practices they undergo may pose significant risks. As a result, incorporating education on integrative medicine into formal medical education and residency training may be necessary.

Keywords: Family physician, complementary medicine, integrative medicine, traditional medicine

Öz

Giriş: Dünya Sağlık Örgütü, 2014-2023 Geleneksel Tıp Stratejisi kapsamında, özellikle birinci basamak sağlık hizmetleri alanında entegre sağlık politikaları geliştirilmesini tavsiye etmektedir. Öte yandan, aile hekimleri genellikle bu uygulamaları hasta bakımına etkili bir şekilde entegre etmek için yetersiz eğitim aldıklarını hissettiklerini bildirmektedir. Bu çalışma, aile hekimlerinin Geleneksel ve Tamamlayıcı Tıp (GETAT) kullanımına ilişkin görüş, anlayış ve deneyimlerini değerlendirmeyi amaçlamaktadır.

Yöntem: İstanbul Sağlık Müdürlüğü Halk Sağlığı Hizmetleri'ne bağlı görev yapan aile hekimlerine 18 soruluk çevrimiçi bir anket uygulanarak GETAT yöntemleri konusundaki eğitim düzeyleri, GETAT uygulamalarının aile hekimliğine entegrasyonu ve hasta bakımı üzerine etkileri gibi konularla ilgili görüşleri değerlendirilmiştir.

Bulgular: Ankete toplam 324 aile hekimi katılmıştır; bunların %12,0'si uzman, %64,5'i 10 yıldan fazla birinci basamakta çalışmış ve %59,6'sı 31-50 yaş aralığındaydı. Hekimlerin %70,1'i GETAT uygulamalarının konvansiyonel tıp ile entegre edilmesini tercih ettiğini bildirdi. Katılımcıların büyük çoğunluğu (%71,6) formal bir GETAT eğitimi almamıştı ve %66,4'ü hasta konsültasyonlarında GETAT hakkında sorular sorduğunu bildirmiştir. Hekimlerin yarısından fazlası (%56,79) koruyucu hekimlikte GETAT yöntemlerinin kullanılması gerektiğine inanmaktadır. En çok tanınan T&CM tekniği, hekimler tarafından da en sık önerilen yöntem olan kupa tedavisi (%18,5) idi.

Sonuç: Çalışmaya katılan aile hekimlerinin çoğu, bu alandaki örgün eğitimlerinin sınırlı olduğunu kabul etmelerine rağmen, entegratif tıbbi ilgi duyduklarını belirtmişlerdir. Kanıt dayalı tamamlayıcı tıp terapileri konusunda doktorlara eğitim vermek, onlara invaziv olmayan ek tedavi seçenekleri sağlayabilir. Öte yandan, hastaların başvurdukları GETAT uygulamaları hakkında aile hekimlerine bilgi verme konusundaki çekinceleri önemli riskler oluşturabilir. Sonuç olarak, tamamlayıcı tıp eğitimini resmi tıp eğitimi ve uzmanlık eğitimi ile birleştirmek gerekli olabilir.

Anahtar kelimeler: Aile hekimliği, tamamlayıcı tıp, entegratif tıp, geleneksel tıp

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Key Points

1. The majority of family physicians surveyed believe that Traditional & Complementary Medicine should play a role in preventive medicine.
2. A large portion of the physicians expressed a preference for the integration of Traditional & Complementary Medicine with Conventional Medicine.
3. The majority of the participants reported that they have not received formal training in Traditional & Complementary Medicine.

Introduction

Traditional and Complementary Medicine (T&CM) is a rapidly growing field globally, with varying prevalence rates in different countries, ranging from 10% to 75%. [1, 2]. The prevalence rates of T&CM practice are greater in countries that have a tradition using these types of therapies; such as African countries (80%) [3], South Korea (74.8%) [4], China (53%), and the Philippines (53.7%) [5] when compared to countries where such practices have not been as common traditionally including the United Kingdom (41.1%) [6], European Union countries (6-30%) [7] more broadly, and the USA (11.8-40%) [8]. It has been observed that patients who use traditional and complementary medicine (T&CM) therapies may not inform their healthcare providers [9], resulting in potential health risks that cannot be anticipated.

Considering the increasing number of healthcare professionals seeking further integrative medicine-related training [10, 11], the need for an integrative approach focused on both education as well as the practice of T&CM has become increasingly apparent. Even among the physicians who have a positive attitude towards integrative medicine, there is hesitation in recommending T&CM therapies to their patients due to limited training and inaccessibility of strong evidence [12]. Literature evaluating the primary healthcare professionals' attitude towards T&CM [12] is largely limited.

Much like the rest of the world, integrative medicine has been becoming increasingly popular in Türkiye. This interest was addressed in Türkiye by the *Regulation on Practices of Traditional and Complementary Medicine*, which enacted on October 27, 2014 [13]. This regulation has represented a pivotal point in the process of establishing legal standards and instruments regarding T&CM practices at a national level and has positioned Türkiye as a global leader in coordinating comprehensive regulations regarding integrative medicine practices. In the context of this legislation, the educational and training standards related to T&CM have been supported, and integrative medicine centers have been opened at medical universities and hospitals across the country [13].

The World Health Organization (WHO), within the scope of the Traditional Medicine Strategy for 2014-2023, has recommended that member states develop integrated health policies, particularly in the area of primary healthcare [14]. Therefore, investigating attitudes towards integrative medicine in family medicine is important and has critical implications on healthcare worldwide.

The integration of T&CM into ConvM is a crucial issue in healthcare and has significant implications for the health policies of member states, as recommended by the World Health Organization (WHO). This study aimed to evaluate the views of family physicians in Türkiye on the integration of T&CM into Conventional Medicine (ConvM) and to compare these views with those from similar studies conducted worldwide. The insights gained from the views of family physicians can provide valuable information for policymaking in this area.

Methods

In this study, the data was collected from the family physicians working at the Family Health Centers affiliated with Istanbul Provincial Health Directorate in 2019. In the city of Istanbul, there were a total of 3868 family physicians working at these Family Health Centers in 2019. An online questionnaire was administered to family physicians working at relevant health centers in Istanbul, Türkiye, through their official professional email addresses. The questionnaire consisted of 18 questions, with six questions aimed at gathering demographic information and the remaining questions focused on assessing the participants' knowledge and attitudes towards Traditional and Complementary Medicine (T&CM). Participants were invited to voluntarily participate in the research survey through their official e-mails (@saglik.gov.tr) and were estimated to complete the questionnaire in approximately 20 minutes. This standardized approach to data collection provided a comprehensive understanding of the views and perspectives of family physicians on the integration of T&CM into Conventional Medicine (ConvM).

Ethical Approval, informed consent and permissions

The present study received ethics committee approval from the Ethical Committee of Istanbul Medipol University (Decision No: 132/2017). Adequate measures were taken to ensure that all participants were fully informed of the study's purpose and nature and provided written informed consent prior to their participation. These ethical considerations ensured that the study was conducted in accordance with relevant guidelines and regulations.

Statistical analysis

The sample size in this study was calculated according to the relationship status between the Age, Gender, Work Experience, Marital Status and Family Medicine type groups, and the answers given from the perspective of ConvM and T&CM. In the present study, three categories were considered for the response variables with respect to ConvM and T&CM. For the variables of age and marital status, which have the highest number of categories, four categories were considered. The degrees of freedom for the analysis was computed as $(3-1) * (4-1) = 6$. The effect size (W) was estimated as 0.26. Based on the degrees of freedom, type 1 error rate (5%), and desired statistical confidence level (95%), a minimum sample size of 309 participants was calculated.

The study targeted 3868 family physicians and a questionnaire was sent to their email addresses. The sample size was considered adequate for the study once 324 individuals responded, resulting in a response rate of 8.4%. To enhance the response rate, the questionnaire was sent via email three times and an announcement was requested from the Istanbul Provincial Health Directorate to be made to the family physicians. During the data analysis stage, 7 surveys were found to have been filled in inappropriately or incompletely and were thus excluded from the study.

In the descriptive statistics of the data, mean, median, standard deviation, frequency, and ratio values were used. SPSS version 22.0 program (IBM Corp., Armonk, NY., USA; 2013) was used for statistical analyses. In statistical analysis, n (%) values were used. Chi-square test was used in the analysis of qualitative data. Fisher's exact test was used when there was less than 5 in one of the table eyes. Statistical significance was accepted as $p < 0.05$.

Results

The survey involved 324 family physicians affiliated with the Istanbul Health Directorate Public Health Services, with a gender distribution of 50.62% male and 49.38% female. As shown in Table 1, in the study 12.04% (n=39) of the participants were specialists, 64.51% (n=209) reported more than 10 years of experience in primary care, and 33.95% (n=110) were in the 41-50 years age group (Table 1).

Table 1. Sociodemographic characteristics of the family physicians.

Sociodemographic characteristics		n	%
Age (years)	25-30	47	14.51
	31-40	83	25.62
	41-50	110	33.95
	>50	84	25.92
Gender	Male	164	50.62
	Female	160	49.38
Work Experience (months)	≤10	115	35.49
	11-20	80	24.69
	21-30	95	29.32
Marital Status	>30	34	10.50
	Single	70	21.60
	Divorced	21	6.48
	Widowed	2	0.63
Family Physician type	Married	231	71.29
	General Practitioner (GP)	285	87.96
	Specialist in Family Medicine (FM)	39	12.04

n: number of participants, %: percentage.

Of the 324 participants, 227 (70.06%) preferred the integration of traditional and complementary medicine (T&CM) practices with conventional medicine (ConvM), while 91 (28.09%) preferred exclusively practicing ConvM. Only 1.90% preferred predominantly T&CM. Over half of the physicians (56.79%) believed T&CM should be used for *preventive medicine*. 66.36% of the participants reported inquiring about T&CM history in their patients during their practice (refer to Table 2).

Table 2. Perspectives and attitudes of participants on the integration of ConvM and T&CM.

Perspectives and attitudes of participants		n	%
Perspective on ConvM and T&CM (predominantly)	Integration of ConvM and T&CM	227	70.06
	ConvM	91	28.09
	T&CM	6	1.85
T&CM methods should be used within the scope of preventive medicine	Yes	184	56.79
	Maybe	67	20.68
	No Idea	25	7.72
	No	48	14.81
Questioning the history of T&CM in the practice	Yes	215	66.36
	No	109	33.64

n: number of participants, %: percentage.

The results indicated that 232 (71.60%) of the participants had not received formal instruction in T&CM. Despite this, 196 (60.49%) of the participants indicated a definite willingness to pursue T&CM if provided with training, while 52 (16.05%) showed a potential interest (Table 3).

Table 3. Perspectives of participants on T&CM.

Perspectives of participants on T&CM		n	%
Having any training on T&CM	Yes	92	28.40
	No	232	71.60
Whether they would like to practice T&CM, if they were trained	Certainly	196	60.49
	Probably	52	16.05
	No Idea	15	4.63
	No	61	18.83

Figure 1 shows that the best-known T&CM technique has been found to be cupping therapy (n=60; 18.52%). Cupping therapy was the most commonly recommended form of treatment by physicians, with 33 (10.19%) reporting it as being "often" recommended and 16 (4.94%) stating it was "always" recommended (Figure 2).

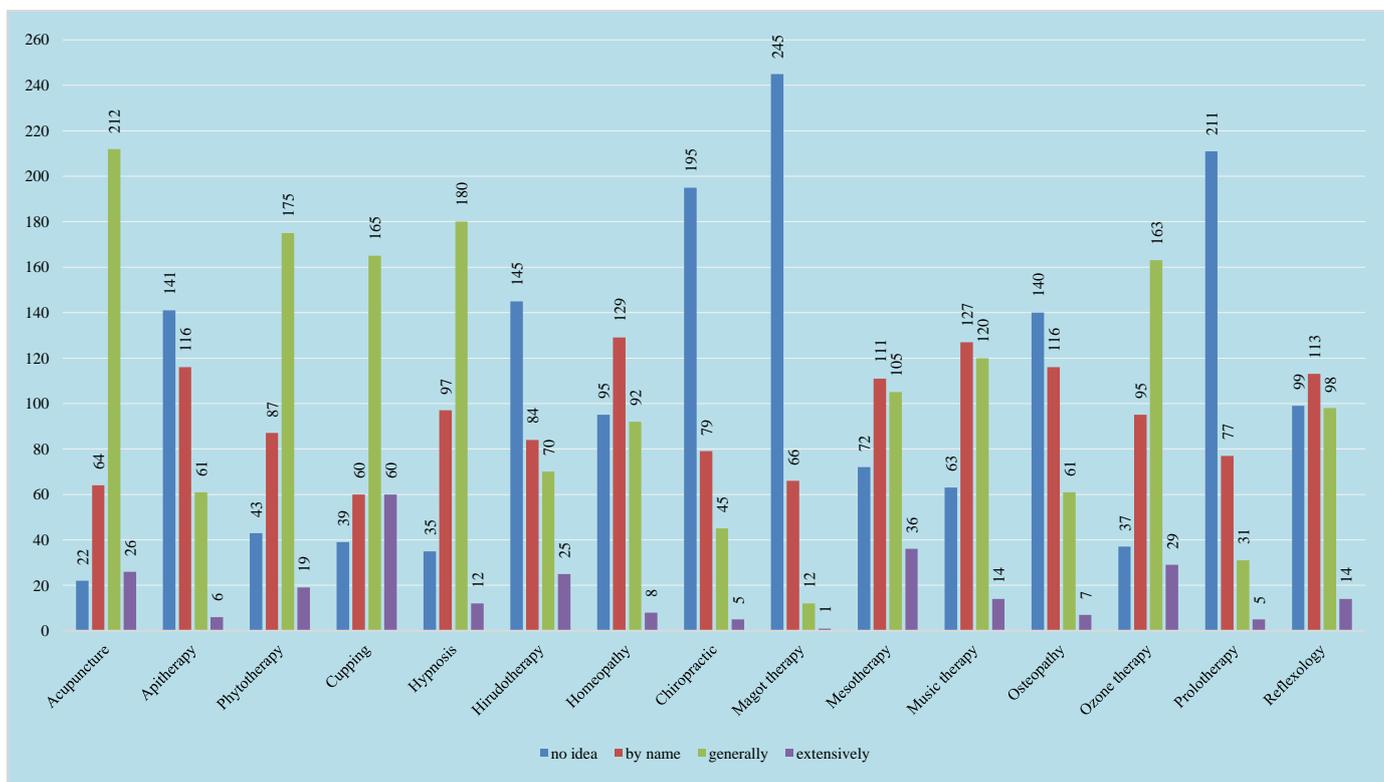


Figure 1. Awareness of family medicine physicians about T&CM methods.

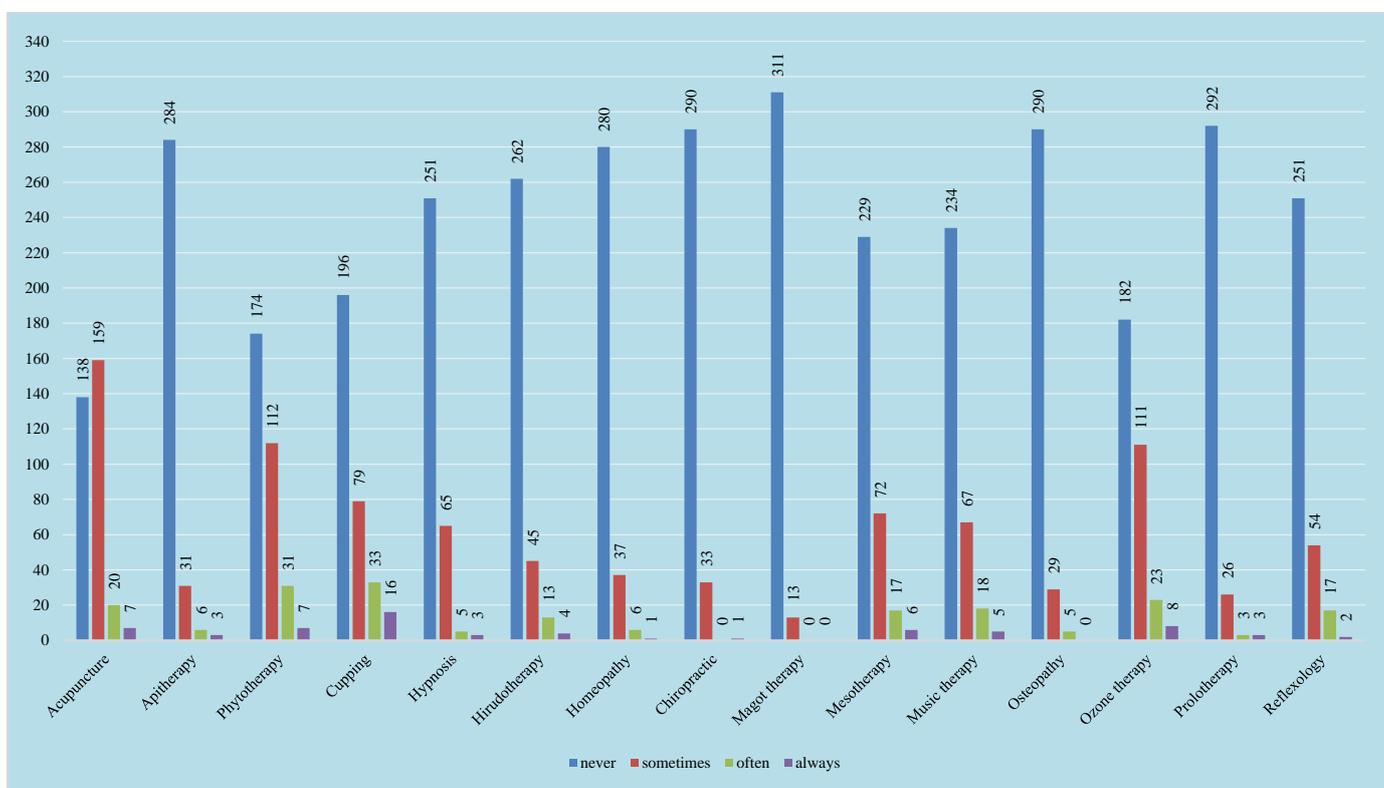


Figure 2. Frequency of recommendation of T&CM methods to patients.

Table 4 presents the distribution of perspectives on ConvM and T&CM based on various sociodemographic factors. In the study group, the perspectives of physicians about ConvM and T&CM did not differ significantly according to age group, gender, work experience (months), marital status and family physician type (for each one $p>0.05$).

Table 4. Distribution of perspectives on ConvM and T&CM according to sociodemographic characteristics.

Sociodemographic Characteristics	Perspectives on ConvM and T&CM (predominantly)			Statistical analysis*
Age group (year)	Integration of ConvM and T&CM, n= 227, (%)	ConvM n= 91, (%)	T&CM n= 6, (%)	P
25-30	34 (72.34)	12 (25.53)	1 (2.13)	0.329
31-40	58 (69.88)	25 (30.12)	0 (0.0)	
41-50	81 (73.64)	25 (22.72)	4 (3.63)	
>50	54 (64.29)	29 (34.52)	1 (1.19)	
Gender				0.212
Male	108 (65.85)	53 (32.32)	3 (1.82)	
Female	119 (74.38)	38 (23.75)	3 (1.88)	
Work Experience (months)				0.199
≤10	84 (73.04)	30 (26.09)	1 (0.87)	
11-20	61 (76.25)	17 (21.25)	2 (2.50)	
21-30	57 (60.00)	35 (36.84)	3 (3.16)	
>30	25 (73.53)	9 (26.47)	0 (0.0)	
Marital Status				0.133
Single	46 (65.71)	23 (32.86)	1 (1.43)	
Married	168 (72.72)	60 (25.97)	3 (1.31)	
Divorced	12 (57.14)	7 (33.33)	2 (9.52)	
Widowed	1 (50.00)	1 (50.00)	0 (0.00)	
Family Physician type				0.584
General Practitioner (GP)	197 (69.12)	82 (28.77)	6 (2.11)	
Specialist in Family Medicine (FM)	30 (76.93)	9 (23.07)	0 (0.0)	

* The Chi-squared test and Fisher's exact test were used to assess for independence between two variables when the comparing groups are independent and not correlated. Statistical significance was accepted as $p<0.05$.

Discussion

In this study, a significant portion of participants expressed a desire for the integration of traditional and complementary medicine (T&CM) into conventional medicine (ConvM). This outcome concurs with prior research studies carried out among healthcare practitioners [15, 16]. A 2008 study carried out in the United States showed that physicians displayed a more positive attitude towards T&CM as compared to patients, with most of them routinely endorsing, providing or referring patients for at least one T&CM modality [17].

Prior studies also suggest that attitudes may vary depending on the specific T&CM modality. For instance, a survey in the UK that assessed physicians' views towards the provision of acupuncture in the National Health Service (NHS) revealed that approximately 60% of the participants held positive attitudes towards acupuncture provision [18]. Conversely, in our study, over 70% of the subjects reported being either familiar or extensively familiar with acupuncture. Nonetheless, our study found cupping therapy to be the most well-known and frequently recommended T&CM practice in Türkiye, which may reflect the influence of cultural norms in a given country or the extent to which familiarity or training with specific techniques may vary in different settings.

Despite a limited body of literature, several studies have indicated a growing interest among healthcare professionals in incorporating complementary medicine into their practices [19]. Additionally, a study by White *et al.* found that 55% of UK general practitioners were "active" in complementary medicine by endorsing or recommending treatments based on complementary medicine in their regular patient care [20].

To our knowledge, this study is the inaugural one in Istanbul, a cosmopolitan city and the economic hub of the country. Evidently, general understanding and education regarding integrative medicine have significantly improved over the past decade. Moreover, there is a scarcity of comparative studies on the adoption of integrative medicine among family medicine physicians and general practitioners in various countries compared to the general public and medical students. In fact, most studies on this subject date back more than two decades, highlighting the necessity for further exploration of medical professionals' perceptions and attitudes towards integrative medicine [4]. Consistent with this trend, recent meta-analyses of research literature and individual studies demonstrate a significant interest in complementary therapies among physicians from various subspecialties [21, 23].

In the current study, more than half of the physicians (56.79%) felt that T&CM methods should be used within the scope of preventive medicine. Thus, we propose a holistic and integrative approach for T&CM methods and ConvM could potentially be applied in primary, secondary, and tertiary prevention interventions, thereby providing patients more opportunities for pursuing personal health while limiting potential risks.

It was thought that the perspectives of the family physicians participating in the study on modern medicine and T&CM might become more pronounced compared to the younger and less experienced ones depending on the age group and the increase in their professional experience. However, our study findings showed that there was no difference in this regard (For age $p=0.329$; for work experience $p=0.199$). Although there is no finding in the literature in terms of family physicians being general practitioners or specialist family physicians, it was thought that there might be a difference in approach to T&CM. However, no difference was found ($p=0.584$). The reason for this may be the insufficient coverage of T&CM subjects in family medicine residency training and the lack of interest. In our study, gender and views on T&CM and modern medicine were evaluated considering that women are more culturally interested in T&CM practices than men. However, no statistically significant difference was found in this regard ($p=0.212$). There was no significant relationship between marital status and views on T&CM and modern medicine ($p=0.133$).

Limitations

The current study has some limitations. First of all, despite the best efforts the response rate was low, which limited the total sample size due to the electronic distribution method (e-mail) used, which is prone to limited returns because of the electronic filtering against spam. Secondly, there is a clear gap in addressing the unique positioning of family physicians as specialists and general practitioners in the recent literature regarding T&CM practices, which makes drawing comparisons to previous studies challenging and thus limits how this study may be interpreted in regard to the experiences of primary care providers in other contexts. Additionally, this study was conducted in Istanbul, Türkiye and the results may not be generalizable to other regions or countries. Cultural and historical differences may impact the views and perspectives of healthcare professionals on the integration of T&CM into Conventional Medicine. Furthermore, the study design was cross-sectional, which does not allow for the examination of causality or changes over time. Finally, the current study did not define explicitly T&CM or integrative medicine. Hence, the responses were subject to the respondents' own interpretations of the terms. This may be further compounded by the linguistic limitation associated with the words *traditional* and *complementary*. In particular, the term *traditional* has been interchangeably used in the literature to mean both mainstream medicine as well as historical or cultural practices.

Despite these limitations, this study provides valuable insights into the views and perspectives of family physicians in Istanbul on the integration of T&CM into Conventional Medicine and highlights the need for further research in this area. Further studies should aim to address the limitations of this study and provide a comprehensive understanding of the integration of T&CM into Conventional Medicine, particularly in the context of primary care.

Conclusion

In conclusion, the study sheds light on the views and knowledge of family physicians in Istanbul towards traditional and complementary medicine practices. Although most of the participants expressed their interest in incorporating these practices in preventive medicine, a lack of formal training was identified as a hindrance in their ability to fully integrate T&CM with conventional medicine. The reluctance of patients to communicate with their family doctors regarding the utilization of traditional and complementary medicine practices may pose significant threats. It is imperative that healthcare leaders and policymakers provide specialized training and continuous medical education opportunities, as well as support the development of high-quality scientific evidence, to further integrate T&CM practices into conventional medicine. This will not only enhance patient care but also help address the need for an increasingly integrated healthcare paradigm as recommended by the World Health Organization.

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Author Contributions		Author Initials
SCD	Study Conception and Design	ATA, MT, SD
AD	Acquisition of Data	AEG, EK, MG
AID	Analysis and Interpretation of Data	ATA, MT, SD, AEG, EK, MG
DM	Drafting of Manuscript	ATA, AEG, EK, MG
CR	Critical Revision	ATA, MT, SD

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