

# The Use of Traditional and Complementary Medicine in Dermatological and Other Diseases During the COVID-19 Pandemic in Turkey

## Traditional and Complementary Medicine Preferences of Patients in Turkey During Pandemic

Seçil Soylu<sup>1</sup>, Seçil Soylu<sup>2</sup>

<sup>1</sup>MD, Assistant Professor, Department Of Dermatovenereology, Healthcare Practice and Research Center, Afyonkarahisar Health Sciences University, Turkey. Zafer Sağlık Külliyesi, Dört Yol Mahallesi 2078 Sokak No: 3, Afyonkarahisar, Turkey. [soylu.se@gmail.com](mailto:soylu.se@gmail.com), ORCID ID no: 0000-0001-5293-5201

<sup>2</sup>Department Of Dermatovenereology, Healthcare Practice And Research Center, Afyonkarahisar Health Sciences University, Turkey. Zafer Sağlık Külliyesi, Dört Yol Mahallesi 2078 Sokak No: 3, Afyonkarahisar, Turkey.

Email: [soylu.se@gmail.com](mailto:soylu.se@gmail.com)

### ABSTRACT

**Objective:** Traditional and complementary medicine (T&CM) is generally applied for the purposes of preventing, diagnosing, treating diseases and maintaining a healthy state. The number of people applying T&CM practices tends to increase day by day. The aim of this study was to determine the use of T&CM in dermatological and other diseases during the COVID-19 pandemic.

**Materials and Methods:** A questionnaire form developed by the researchers was used as data collection tool in this cross-sectional and descriptive study. The sample of the study consisted of Afyonkarahisar Health Sciences University Medicine Faculty 3rd year students and their relatives (n=331). The participants were reached by the convenience sampling method. Descriptive statistics were used in the analysis of the data.

**Results:** It was determined that 50.5% of the participants benefited from T&CM. 31.7% of the participants used these practices after March 2020 and 39% benefited from them. According to the participants, the most beneficial T&CM method was the herbal method and the most important source of information about T&CM was the immediate vicinity (32.3%). While the rate of use of T&CM was 36.7% before the pandemic, this rate was determined as 31.7% after the pandemic.

**Conclusion:** The results obtained showed that T&CM methods are important practices in terms of dermatological and other health problems. However, unexpectedly, participants' use of T&CM during the pandemic period decreased compared to the pre-pandemic period. In this regard, we consider that comparative prospective multicenter studies including other cities will be more enlightening on this issue.

**Keywords:** Complementary Therapies, COVID-19, Questionnaire, Medical students, Traditional medicine, Pandemic

**How to Cite:** Seçil Soylu, Seçil Soylu (2023) The Use of Traditional and Complementary Medicine in Dermatological and Other Diseases During the COVID-19 Pandemic in Turkey, Traditional and Complementary Medicine Preferences of Patients in Turkey During Pandemic. Journal of Carcinogenesis, Vol.22, No.2, 216- 226

## 1. INTRODUCTION

Traditional and complementary medicine (T&CM) practices date back centuries. T&CM is a field that guides the regulation of these practices to meet the health needs of aging populations and chronic diseases associated with lifestyle.<sup>1</sup> Today, these practices have started to become widespread in almost every geography. Different data prove that the role of T&CM in the national health systems of more and more countries is becoming clearer. For example, in some Asian countries, 80% of the population benefits from traditional and complementary medicine practices as primary health care. Similarly, more than 40% of the population in developed countries resort to traditional and complementary medicine practices.<sup>2</sup>

The terms complementary/alternative/non-conventional/supportive/natural/holistic medicine are used interchangeably for traditional medicine.<sup>3</sup> In recent years, as a result of the discussions made by international organizations especially World Health Organization (WHO) the concept of T&CM has been used instead of the concept of alternative medicine, with the emphasis that it can be an alternative to treatment, not medicine.<sup>4</sup>

The National Center for Complementary and Alternative Medicine (NCCAM) have defined the use of T&CM practices together with modern medicine as complementary medicine. The replacement of these practices with modern medicine is

expressed as alternative medicine.<sup>5</sup> According to the European Federation of Complementary and Alternative Medicine (EFCAM), T&CM is increasingly used by individuals across Europe to protect their health and alleviate a health problem. Individuals want to choose the therapeutic approach that they think will produce the best results for their health. Therefore, T&CM can be used independently or in combination with conventional medicine approaches.<sup>6</sup>

WHO continues to work to develop norms, standards and technical documents based on reliable information and data as part of the WHO Traditional Medicine Strategy 2014-2023. As of 2018, 98 member countries have developed national policies for T&CM, 109 countries have enacted national laws or regulations and 124 countries have implemented regulations on herbal medicines.<sup>1</sup> In Turkey, T&CM practices have been carried out within the framework of the relevant regulation since 27.10.2014 to determine the traditional and complementary medicine application methods for human health; to train and authorize the people who will apply these methods and to regulate the working procedures and principles of the health institutions where these methods will be applied.<sup>7</sup>

While the interest in T&CM practices has increased significantly over the past decade, they have also proven to be effective in the prevention and treatment of infectious diseases.<sup>8,9</sup> Similarly, in the COVID-19 pandemic, non-pharmacological and self-management approaches have increased to prevent the spread of the epidemic.<sup>10</sup> Due to the psychological impact of the COVID-19 epidemic, many people have started to prefer and try approaches such as self-care interventions and T&CM for protecting themselves from the epidemic.<sup>11</sup> The lack of any vaccine or proven treatment for the COVID-19 at the beginning of the pandemic is another important factor that have caused the spread of T&CM during this period.<sup>12</sup> Moreover, many governments have formally or unofficially promoted the use of T&CM in COVID-19 because of some popular belief or for its effectiveness in relieving other respiratory symptoms.<sup>13</sup>

The reasons for preferring T&CM may differ according to countries and individuals. The most common reason for T&CM is the perception that it will not harm because it is natural.<sup>14</sup> Thus, T&CM practices are used to manage many different diseases and symptoms associated with these diseases or to strengthen the immune system.<sup>15</sup> Some of the T&CM practices can also be applied to eliminate dermatological problems. Stress and psychological tension caused by the COVID-19 pandemic, which has been going on for about 2 years, form the basis of many diseases. Dermatological diseases can also be evaluated in this context. Accordingly, the number of individual benefiting from T&CM tends to increase in dermatology as in every field of medicine.

To the best of our knowledge, although there are some studies in the literature on the use of T&CM in Turkey during the COVID-19 period, our study will be the first study conducted with medicine faculty students and their relatives. In this context, the aim of this study was to determine the use of T&CM for dermatology complaints/diseases and other complaints/diseases of X University Faculty of Medicine 3rd year students and their relatives during the COVID-19 pandemic. It was also aimed to determine whether the participants' preferences for using T&CM changed before and after the pandemic.

## 2. Materials and Methods

The study was carried out with the permission of the Afyonkarahisar Health Sciences University Hospital Scientific Research Evaluation and Ethics Committee (Date: 07.01.2022, Decision No: 2022/1). We obtained an informed consent form from all patients for procedure. All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Our prospective, descriptive and cross-sectional study was carried out between December 2021 and March 2022. Medicine faculty students and their relatives (n=311) were reached by convenience sampling method. Ethical permission was obtained before the data collection process. After the purpose of the study was explained, the questionnaire form was applied face to face to the volunteers.

Descriptive information (age, gender, hometown, marital status, education, employment, income, complaint, definitive diagnosis, if any systemic disease and allergy) were included in our questionnaire. In the second part of the questionnaire, the participants were asked about the T&CM methods they knew and whether they used them during the pandemic period. The participants who declared that they used the T&CM method were asked for which health problem and/or disease they used, the effect/side effect they experienced, the source of information about these methods, the frequency of use and whether they used T&CM methods related to the same health problem and/or disease before the pandemic period. They were also asked how often they applied to the dermatology clinic and other polyclinics regarding the current health problem/disease during the pandemic period.

### 3. Statistical analysis

General information of the participants was analyzed with descriptive statistics. Categorical general information was presented as numbers and percentages. Metric ones were presented and interpreted as minimum, maximum, mean and standard deviation. The answers of the participants to the questionnaire questions were summarized with descriptive statistics by using number and percentage. All data were analyzed using the statistical package for social science (SPSS) 25.0 for windows program.

### 4. Results

54.1% of the participants were male and the mean age was  $25.05 \pm 11.04$ . 8.1% of them had a bachelor's degree or above. 81.9% of the participants stated that they did not work. 29.9% of them had a monthly income level of 3500-7000TL (Table 1).

The most common health problem experienced by the participants was acne with 27.2%. The duration and rates of acne were 17.5% for 0-5 years, 8.2% for 5-10 years, and 1.5% for 10 years and above. Contact dermatitis was the second most common problem. 10.6% of the participants stated that they experienced contact dermatitis. Among those who had this problem, 0-5 years is the highest with 7.3%. The rate of other health problems was below 10% (Table 2).

50.5% of the participants (n=167) stated that they used T&CM. Among those who answered the following statement, 31.7% (n=105) declared that they used T&CM after March 2020 and 39% (n=129) mentioned that they benefited from these practices (Table 3).

The most used and most beneficial T&CM application for different health problems was the herbal method. 10.9% (n=36) of the participants who used T&CM for acne problem and 15.1% (n=50) of participants who used T&CM for warts problem reported that they benefited from the herbal method (Table 4).

Participants who stated that they had side effects were 5.7% (n=19), while those who stated that they continued the treatment were 29.9% (n=99). It was determined that 11.5% (n=38) of the participants stated that they accessed a doctor due to the same disease during the pandemic period every six months. The rate of people who used T&CM with the same frequency before the pandemic due to the same disease was 16.3% (n=54) (Table 5).

The most important source of information was "relatives, friends, neighbors" (32.3% (n=107)). Those who stated the most important source of information as "physician, pharmacist" were 21.5% (n=71); "TV, radio, newspaper, internet" were at the level of 17.8% (n=59) and "herbalist" were at the level of 6.6% (n=22). The most prominent reason for preferring T&CM was "considering that it was beneficial" at 38.4% (n=127). Inability to access health services was the least stated reason for preference (1.5, n=5) (Table 6).

### 5. Discussion

As in the history of epidemics, the Covid-19 global epidemic affected the lives of society. Individuals were protected from the epidemic in various ways and tried to take precautions.<sup>16</sup> Despite the increase in the number of patients admitted to the hospital during the epidemic, the number of patients who were given an appointment decreased. In addition, due to the fact that drug and vaccine studies were continuing, people started to use alternative methods in our country as well as all over the world. For these reasons, it is believed that people from all walks of life have used traditional treatment practices within the scope of complementary practices and measures.<sup>17</sup> Based on this idea, we aimed to determine the use of T&CM of medical school students and their relatives during the COVID-19 pandemic.

In our study, we concluded that 50.5% of the participants used T&CM. 31.7% of these participants used T&CM after March 2020 and 39% benefited from these practices. It was determined that the most beneficial T&CM method was the herbal method and the most important source of information about the T&CM was the immediate vicinity with 32.3%. The most common health problem experienced by the participants was acne with 27.2%.

Sönmez et al. evaluated the knowledge, attitudes and behaviors of medicine faculty students about T&CM. They determined that 50% of the students used T&CM and the internet, their immediate vicinity and neighbors were the main information source.<sup>18</sup> In their study, Ayraler et al. concluded that 47.9% of medicine faculty students had a positive view of T&CM and 44.3% (n=62) of their families benefited from these practices.<sup>19</sup> El-Olemy et al. determined that 66.6% of medicine faculty students benefited from T&CM and preferred herbal medicine most frequently.<sup>20</sup> Ameade et al. reported that herbal medicine (63.6%) was the most widely known method of T&CM by medicine faculty students and their relatives /friends were the most frequently used information source.<sup>21</sup>

Al Mansour et al. concluded that medicine faculty students had a positive attitude towards T&CM and increasingly preferred these practices.<sup>22</sup> Karahan et al. determined that 19.1% of the medicine faculty students had previously benefited from any T&CM.<sup>23</sup> Basatemür et al. reported that the rate of use of T&CM by medicine faculty students was 31.4%.<sup>24</sup> Acar et al. evaluated the approaches of medicine assistants on T&CM and determined that 22.5% of the participants used these practices before.<sup>25</sup> Şenol et al. stated that medical school students benefited from different T&CM practices.<sup>26</sup>

In the literature, there are also studies on T&CM conducted with different student groups. In their study, Ege et al. determined that the rate of use of T&CM among the students of the faculty of dentistry was 65.1%.<sup>27</sup> Şahin et al. found that 33.9% of the nursing students used T&CM methods more than once.<sup>28</sup> İlhan and Sirekbasan reported that 28.8% of health services vocational high school students used T&CM methods. The internet (27.10%), relatives (22.60%), and friends (14.90%) were the mostly used information source.<sup>29</sup>

As can be seen, although the rates of T&CM usage differed in studies conducted with different student groups, students benefited from these applications, as in our study. However, it was a striking common result of our research and other studies that students considered their immediate vicinity as a source of information instead of academic and systematic sources of information, even though they were studying in a health-related department.

A noteworthy result of our study was that while 36.7% of the participants stated that they used T&CM before the pandemic, T&CM use decreased to 31.7% in the post-pandemic period. In the study of Büyük et al., it was determined that while 38.9% of families used T&CM methods for their children before the COVID-19 pandemic, this rate increased to 92.5% during the COVID-19 pandemic.<sup>17</sup> This finding is inconsistent with our results.

Delibaş et al. conducted their study with 3242 participants and determined that T&CM practices were widely used (70.5%) and herbal treatment (35.5%) was the most preferred treatment method during the pandemic period in Turkey.<sup>30</sup> Karataş et al., concluded that 39.3% of their participants benefited from T&CM during the pandemic period and mostly preferred method was herbal medicine (30.8%). They also concluded that social media (52.4%), relatives/neighbor/friends (27.5%) were the most frequently used information sources.<sup>31</sup> In another study, it was determined that during the COVID-19 period, elderly people used traditional methods and 63% of them benefited from herbal methods.<sup>32</sup> Çelik et al. conducted their study with 229 mothers. They concluded that 53.7% of the mothers benefited from alternative medicine practices to protect their children from COVID-19 and 46.6% preferred herbal products.<sup>33</sup>

Doğan and Fişkın conducted their studies with patients diagnosed with COVID-19. They determined that these patients frequently benefited from integrative treatment methods and that the recommendations of their families and friends were effective in the integrative therapy process.<sup>34</sup> Lam et al. determined that 44% of their participants used T&CM practices during the pandemic and herbal medicine was one of the most frequently used methods.<sup>35</sup> Deghan et al. reported that 84% of their participants benefited from T&CM during the pandemic and herbal medicines (48.8%) were the most frequently used method.<sup>36</sup> Nguyen et al. determined that almost half of their participants preferred T&CM practices during the COVID-19 pandemic and approximately 70% found these practices were beneficial.<sup>37</sup> As can be seen, the rates of T&CM use in these studies were generally higher than our study. We think that this may be related to various characteristics of the participants (marital status, age, urbanity, monthly income, access to hospital, educational status, etc.).

The participants in our study stated that the main reason for preferring T&CM was that they thought these applications were beneficial. It was remarkable that despite being in the pandemic period, the participants stated not being able to access health services as the least preferred reason. We think that comparative prospective multicenter studies covering other cities will be more enlightening on this issue.

## 6. Study Limitations

Our study has shown that T&CM methods are important applications in terms of dermatological and other health issues. However, when compared in terms of usage before and during the pandemic, it was found that the usage rate of T&CM among participants decreased during this period when access to doctors and hospitals was limited. In this context, we believe that comparative prospective multicenter studies, including other cities, would be more enlightening on this issue.

## 7. Conclusion

The development of T&CM, a treatment method that has been insufficiently known even by the health community until recently, is progressing confidently on solid ground along with infrastructure studies. In parallel with the increase in the number of individuals preferring T&CM, physicians will frequently encounter patients who use these methods in their daily practices and they will need to guide their patients correctly.<sup>38</sup> For this reason, conducting academic studies on T&CM will increase the knowledge of not only current physicians but also medical school students, the physicians of the

future. Accordingly, this will enable more widespread and more accurate use of T&CM treatments.

**Acknowledgments:**

None

**Disclosure:**

The author reports no conflicts of interest in this work.

**References**

- [1] World Health Organization. (2019). WHO global report on traditional and complementary medicine 2019. World Health Organization.
- [2] Arpacı Ö. Sağlık Bakanlığı tarafından kabul edilen geleneksel ve tamamlayıcı tıp uygulamaları ve bunların hukuka uygunluğunun değerlendirilmesi. *Dokuz Eylül Üniversitesi Hukuk Fakültesi Dergisi*. 2021;23(2), 1245-307.
- [3] Biçer İ, Balçık PY. Geleneksel ve tamamlayıcı tıp: Türkiye ve seçilen ülkelerinin incelenmesi. *Hacettepe Sağlık İdaresi Dergisi*. 2019;22(1), 245-57.
- [4] Mollahaliloğlu S, Uğurlu FG, Kalaycı MZ ve Öztaş D. Geleneksel ve tamamlayıcı tıp uygulamalarında yeni dönem. *Ankara Medical Journal*. 2015; 15(2): 102- 5.
- [5] Orhan MF, Elmas B, Altındiş S, Karagöz R, Altındiş M. Aile hekimi ve pediatristlerin geleneksel ve tamamlayıcı tıba (GETAT) bakışı. *Journal of Biotechnology and Strategic Health Research*. 2019;3:161-7.
- [6] <http://www.efcam.eu/efcam/> Date of Access: 21.07.2022
- [7] <https://www.resmigazete.gov.tr/eskiler/2014/10/20141027-3.htm> Date of Access: 21.07.2022
- [8] Liu X, Zhang M, He L, Li Y. Chinese herbs combined with Western medicine for severe acute respiratory syndrome (SARS). *Cochrane Database Syst Rev*. 2012;10(10):CD004882.
- [9] Arora R, Chawla R, Marwah R, Arora P, Sharma RK, Kaushik V, et al. Potential of complementary and alternative medicine in preventive management of novel H1N1 flu (Swine flu) pandemic: thwarting potential disasters in the bud. *Evid Based Complement Alternat Med*. 2011;2011:586506. pmid:20976081
- [10] Lam, CS, Koon HK, Chung VCH., Cheung YT. A public survey of traditional, complementary and integrative medicine use during the COVID-19 outbreak in Hong Kong. *PloS one*. 2021;16(7), e0253890.
- [11] Karataş, Y, Khan, Z., Bilen, Ç., Boz A, Özagil ESG, Abussuutoğlu AB, Rahman H. Traditional and Complementary Medicine use and beliefs during COVID-19 outbreak: A cross-sectional survey among the general population in Turkey. *Advances in Integrative Medicine*. 2021;8(4), 261-6.
- [12] Ganguly S, Bakhshi S. Traditional and complementary medicine during COVID-19 pandemic. *Phytotherapy Research*. 2020;34(12):3083-4. doi: 10.1002/ptr.6828.
- [13] Paudyal V, Sun S, Hussain R, Abutaleb MH, Hedima EW. Complementary and alternative medicines use in COVID-19: A global perspective on practice, policy and research. *Research in Social and Administrative Pharmacy*. 2022;18(3), 2524-8.
- [14] Zararsız F. Geleneksel ve tamamlayıcı (GETAT) tıp uygulamalarına yönelik tutum ve davranışların belirlenmesi ve sağlık turizmi açısından değerlendirilmesi: Alanya örneği (Master's thesis, Alanya Alaaddin Keykubat Üniversitesi/Lisansüstü Eğitim Enstitüsü/Sağlık Turizmi Ana Bilim Dalı). 2022
- [15] Nandan A, Tiwari S, Sharma V. Exploring alternative medicine options for the prevention or treatment of coronavirus disease 2019 (COVID-19)—a systematic scoping review [published online ahead of print May 19, 2020]. *medRxiv*. doi:10.1101/2020.05.14.20101352.
- [16] Kaplan M. Covid-19: Küresel salgın sürecinde geleneksel ve tamamlayıcı tedavi uygulamaları. *Milli Folklor*. 2020;16(127): 35-45.
- [17] Büyük ET, Uzşen H, Koyun M, Lezgioglu H, Tuğba SARI, Çakır Z. Ailelerin Covid-19 pandemisi sürecinde çocuklarının sağlığını korumak ve geliştirmek için başvurdukları geleneksel tamamlayıcı alternatif tedavi yöntemleri (Getat). *Samsun Sağlık Bilimleri Dergisi*. 2022;27(1), 99-112.
- [18] Sönmez CI, Başer DA, Küçükdağ HN, Kayar O, İdris ACAR, Güner PD. Tıp fakültesi öğrencilerinin geleneksel ve tamamlayıcı tıp ile ilgili bilgi durumlarının ve davranışlarının değerlendirilmesi. *Konuralp Medical Journal*. 2018;10(3): 276-81.
- [19] Ayraller A, Yavuz E, Oruç MA, Öztürk O. Tıp Fakültesi Öğrencilerinin Geleneksel ve Tamamlayıcı Tıp Hakkındaki Bilgi Düzeyleri ve Görüşleri. *Türkiye Aile Hekimliği Dergisi*. 2020;24(4), 196-202.
- [20] El-Olemy AT, Radwan NM, Dawoud WM, Zayed HA, Ali EA, Elsabbagh H, et al. Medical students' knowledge, attitude and practice towards traditional and complementary medicine, Tanta City, Gharbiyah Governorate, Egypt. *Journal of Complementary and Alternative Medical Research*. 2017;3(1): 1-10.
- [21] Ameade EPK, Amalba A, Helegbe GK, Mohammed BS. Medical students' knowledge and attitude towards complementary and alternative medicine—A survey in Ghana. *Journal of Traditional and Complementary Medicine*. 2016;6(3):230-6.
- [22] Al Mansour MA, Al-Bedah AM, AlRukban MO, Elsubai IS, Mohamed EY, El Olemy AT, et al. Medical students' knowledge, attitude, and practice of complementary and alternative medicine: a pre-and post-exposure survey in Majmaah University, Saudi Arabia. *Adv Med Educ Pract*. 2015;3(6):407-20. doi: 10.2147/AMEP.S82306. PMID:

- 26082671; PMID: PMC4461096.
- [23] Karahan S, Ağadayı E, Karagöz N. Tıp Fakültesi Öğrencilerinin Geleneksel ve Tamamlayıcı Tıp ile İlgili Bilgi Tutum ve Davranışları'nın Değerlendirilmesi. Cumhuriyet Medical Journal. 2020;42(4):434-40.
- [24] Basatemür M, Güneş G, Aylaz R. Tıp fakültesi öğrencilerinin geleneksel ve tamamlayıcı tedavi konusunda bilgi, tutum ve davranışları. Estüdam Halk Sağlığı Dergisi. 2020;5(1):43-52.
- [25] Acar A, Eker RN, Balaban B, Yasin YK. Aile hekimliği asistanlarının geleneksel ve tamamlayıcı tıp uygulamaları konusundaki yaklaşımlarının değerlendirilmesi. J Tradit Complem Med. 2022;5(2):143-50. doi: 10.5336/jtracom.2021-86625
- [26] Şenol Y, Erdemli B, Demirezen M. Tıp fakültesi öğrencilerinin geleneksel ve tamamlayıcı tıp hakkındaki bilgi ve davranışlarının incelenmesi. Anadolu Güncel Tıp Dergisi. 2020;2(1): 6-12.
- [27] Ege B, Kurt MY, Ege M, Geyik A. Diş hekimliği fakültesi öğrencilerinin geleneksel ve tamamlayıcı tıp uygulamaları ile ilgili tutumlarının değerlendirilmesi. Geleneksel ve Tamamlayıcı Tıp Dergisi. 2020;3(2):178-90.
- [28] Şahin N, Aydın D, Berna AKAY. Hemşirelik öğrencilerinin bütüncül tamamlayıcı ve alternatif tıba karşı tutumlarının değerlendirilmesi. Balıkesir Sağlık Bilimleri Dergisi. 2019;8(1), 21-6.
- [29] İlhan AO, Sirekbasan S, Tan TG. Sağlık hizmetleri meslek yüksek okulu öğrencilerinin geleneksel ve tamamlayıcı tıp ile ilgili bilgi düzey ve tutumlarının değerlendirilmesi. Ankara Medical Journal. 2019;19(4): 736-44.
- [30] Delibaş L, Polat F, Ekren Çakıcı A. Adults' state of using complementary and alternative medicine during the COVID-19 pandemic. Holistic Nursing Practice. April 05, 2022 - Volume - Issue - 10.1097/HNP.0000000000000506 doi: 10.1097/HNP.0000000000000506
- [31] Karataş Y, Khan Z, Bilen Ç, Boz A, Özagil ESG, Abussuutoğlu AB, et al. Traditional and complementary medicine use and beliefs during COVID-19 outbreak: A cross-sectional survey among the general population in Turkey. Adv Integr Med. 2021;8(4):261-266. doi: 10.1016/j.aimed.2021.09.002. Epub 2021 Sep 20. PMID: 34567968; PMID: PMC8452352.
- [32] Baş K. Evaluation of resorting to traditional practices by elderly people during the Covid-19 Pandemic. Journal of International Health Sciences and Management. 2022; 8(15):75-83.
- [33] Çelik M, Sungur M, Geçici F. Alternative medicine methods applied to their children by mothers with fear of Covid-19. Sağlık Akademisi Kastamonu, 7(Covid-19 Ek Sayısı), 28-37.
- [34] Doğan N, Fışkın G. Use of Integrative Treatment Methods by Individuals with COVID-19. The Journal for Nurse Practitioners. 2022;18(5), 539-46.
- [35] Dehghan M, Ghanbari A, Heidari FG, Shahrabaki PM, Zakeri MA. Use of complementary and alternative medicine in general population during COVID-19 outbreak: A survey in Iran. Journal of Integrative Medicine. 2022;20(1): 45-51.
- [36] Lam CS, Koon HK, Chung VCH, Cheung YT. A public survey of traditional, complementary and integrative medicine use during the COVID-19 outbreak in Hong Kong. PloS one. 2021;16(7), e0253890.
- [37] Nguyen PH, De Tran V, Pham DT, Dao TNP, Dewey RS. Use of and attitudes towards herbal medicine during the COVID-19 pandemic: a cross-sectional study in Vietnam. European Journal of Integrative Medicine. 2021; 44, 101328.
- [38] Taştan, K. Ülkemizde geleneksel ve tamamlayıcı tıbbın kilometre taşları. Ankara Medical Journal. 2018; 18(3):458-9.

**Tables**

**Table 1. General Information of the Participant**

		<b>n</b>	<b>%</b>
Gender	Male	152	45,9
	Female	179	54,1
Educational Status	Illiterate	1	,3
	Literate	3	,9
	Primary education	8	2,4
	High school	24	7,3
	Associate degree	30	9,1
	Bachelor and above	265	80,1
	Working Status	No answer	2
	Working	58	17,5
	Not working	271	81,9
Monthly Income	No answer	3	0,9
	0-3500 TL	85	25,7
	3500-7000 TL	99	29,9
	7000-15000 TL	98	29,6
	15000 TL and above	46	13,9

**Table 2. Duration of Health Problems of the Participants**

<b>Health Problems Duration</b>	<b>Duration</b>	<b>n</b>	<b>%</b>
Acne vulgaris	No answer	241	72,8
	0-5 Years	58	17,5
	5-10 Years	27	8,2
	10 Years and above	5	1,5
Alopecia areata	No answer	324	97,9
	0-5 Years	7	2,1
Contact dermatitis	No answer	296	89,4
	0-5 Years	24	7,3
	5-10 Years	8	2,4
	10 Years and above	3	,9
Pityriasis rosea	No answer	329	99,4
	0-5 Years	2	,6
Psoriasis	No answer	329	99,4
	0-5 Years	1	,3
	10 Years and above	1	,3
Vitiligo	No answer	327	98,8
	5-10 Years	2	,6
	10 Years and above	2	,6
Fungal Disease of The Skin	No answer	314	94,9
	0-5 Years	12	3,6
	5-10 Years	5	1,5
Callus	No answer	316	95,5
	0-5 Years	9	2,7
	5-10 Years	4	1,2
	10 Years and above	2	,6
Wart	No answer	316	95,5
	0-5 Years	10	3,0
	5-10 Years	3	,9
	10 Years and above	2	,6
Parasitic skin disease	No answer	326	98,5
	0-5 Years	4	1,2
	10 Years and above	1	,3
Hypertension	No answer	316	95,5

	0-5 Years	6	1,8
	5-10 Years	2	,6
	10 Years and above	7	2,1
Endocrinological problems	No answer	316	95,5
	0-5 Years	8	2,4
	5-10 Years	4	1,2
	10 Years and above	3	,9
Musculoskeletal system problems	No answer	321	97,0
	0-5 Years	4	1,2
	5-10 Years	3	,9
	10 Years and above	3	,9
Cardiovascular problems	No answer	324	97,9
	0-5 Years	3	,9
	5-10 Years	1	,3
	10 Years and above	3	,9
Oncological problems	No answer	329	99,4
	0-5 Years	2	,6
Gastroenterological problems	No answer	309	93,4
	0-5 Years	11	3,3
	5-10 Years	5	1,5
	10 Years and above	6	1,8

**Table 3. Traditional and Complementary Medicine Usage Frequency and Rates of The Participants**

		n	%
T&CM use	No answer	11	3,3
	Yes	167	50,5
	No	153	46,2
Use After March 2021	No answer	126	38,1
	Yes	105	31,7
	No	100	30,2
T&CM Benefit	No answer	137	41,4
	Yes	129	39,0
	No	65	19,6

T&CM: Traditional and complementary medicine

**Table 4. Benefits of Traditional and Complementary Medicine Applications for Participants**

T&CM Methods	n	%	
Acne vulgaris	No answer	273	82,5
	Herbal, benefited	36	10,9
	Herbal, no benefit	5	1,5
	Herbal (pills, vitamins), benefited	6	1,8
	Herbal (pills, vitamins), no benefit	2	,6
	Hijama, benefited	1	,3
	Pray, benefited	3	,9
	Pray, no use	3	,9
	Other, benefited	2	,6
Alopecia areata	No answer	326	98,5
	Herbal, benefited	2	,6
	Homeopathy, no use	1	,3
	Pray, benefited	1	,3
	Pray, no use	1	,3
Contact dermatitis	No answer	313	94,6
	Herbal, benefited	8	2,4
	Herbal, no benefit	2	,6
	Herbal (pills, vitamins), benefited	2	,6
	Pray, benefited	2	,6



	Pray, no use	2	,6
	Meditation, benefited	2	,6
Pityriasis rosea	No answer	330	99,7
	Herbal, no benefit	1	,3
Psoriasis	No answer	331	100,0
Vitiligo	No answer	330	99,7
	Herbal, benefited	1	,3
Fungal Disease of The Skin	No answer	322	97,3
	Herbal, benefited	7	2,1
	Other, benefited	2	,6
Callus	No answer	327	98,8
	Herbal, benefited	2	,6
	Herbal, no benefit	1	,3
	Other, benefited	1	,3
Wart	No answer	319	96,4
	Herbal, benefited	4	1,2
	Herbal, no benefit	1	,3
	Herbal (pills, vitamins), benefited	1	,3
	Pray, benefited	5	1,5
	Other, no use	1	,3
Parasitic skin disease	No answer	328	99,1
	Herbal, benefited	2	,6
	Herbal, no benefit	1	,3
Hypertension	No answer	329	99,4
	Pray, benefited	1	,3
	Other, benefited	1	,3
Endocrinological problems	No answer	327	98,8
	Herbal, no benefit	1	,3
	Herbal (pills, vitamins), benefited	1	,3
	Meditation, benefited	2	,6
Musculoskeletal system problems	No answer	321	97,0
	Herbal, benefited	2	,6
	Herbal, no benefit	1	,3
	Herbal (pills, vitamins), benefited	2	,6
	Cup, benefited	1	,3
	Hijama, benefited	2	,6
	Leech, benefited	1	,3
	Meditation, benefited	1	,3
Cardiovascular problems	No answer	327	98,8
	Herbal, no benefit	1	,3
	Herbal (pills, vitamins), benefited	3	,9
Oncological problems	No answer	330	99,7
	Other, no use	1	,3
Gastroenterological problems	No answer	321	97,0
	Herbal, benefited	2	,6
	Herbal, no benefit	2	,6
	Herbal (pills, vitamins), benefited	4	1,2
	Herbal (pills, vitamins), no benefit	1	,3
	Other, benefited	1	,3
The other systemic diseases	No answer	304	91,8
	Herbal, benefited	6	1,8
	Herbal, no benefit	3	,9
	Herbal (pills, vitamins), benefited	5	1,5
	Acupuncture, benefited	2	,6
	Acupuncture, no benefit	1	,3
	Cup, benefited	2	,6
	Hijama, benefited	1	,3

	Homeopathy, benefited	1	,3
	Pray, benefited	4	1,2
	Meditation, benefited	1	,3
	Other, benefited	1	,3
Desquamation of skin	No answer	318	96,1
	Herbal, benefited	10	3,0
	Herbal, no benefit	1	,3
	Herbal (pills, vitamins), no benefit	1	,3
	Other, benefited	1	,3
Xerosis of cutis	No answer	272	82,2
	Herbal, benefited	50	15,1
	Herbal, no benefit	2	,6
	Herbal (pills, vitamins), benefited	5	1,5
	Pray, benefited	2	,6
Dissatisfaction with the external appearance	No answer	306	92,4
	Herbal, benefited	14	4,2
	Herbal, no benefit	4	1,2
	Herbal (pills, vitamins), benefited	1	,3
	Herbal (pills, vitamins), no benefit	1	,3
	Pray, benefited	1	,3
	Meditation, benefited	1	,3
	Other, benefited	2	,6
	Other, no use	1	,3
Erythema	No answer	307	92,7
	Herbal, benefited	19	5,7
	Herbal, no benefit	3	,9
	Herbal (pills, vitamins), no benefit	1	,3
	Hijama, benefited	1	,3
Pain	No answer	291	87,9
	Herbal, benefited	19	5,7
	Herbal (pills, vitamins), benefited	11	3,3
	Acupuncture, benefited	1	,3
	Acupuncture, no benefit	1	,3
	Cup, benefited	1	,3
	Hijama, benefited	1	,3
	Pray, benefited	4	1,2
	Meditation, benefited	1	,3
	Other, benefited	1	,3
Acneiform eruption	No answer	276	83,4
	Herbal, benefited	35	10,6
	Herbal, no benefit	8	2,4
	Herbal (pills, vitamins), benefited	5	1,5
	Herbal (pills, vitamins), no benefit	2	,6
	Pray, benefited	1	,3
	Other, benefited	4	1,2
Pruritus	No answer	304	91,8
	Herbal, benefited	22	6,6
	Herbal, no benefit	2	,6
	Herbal (pills, vitamins), no benefit	1	,3
	Other, benefited	2	,6
Eruption	No answer	316	95,5
	Herbal, benefited	12	3,6
	Herbal, no benefit	1	,3
	Herbal (pills, vitamins), no benefit	2	,6

**Table 5. Other information about the T&CM use of the participants during the pandemic period**

		n	%
Side effect	No answer	150	45,3
	Yes	19	5,7
	No	162	48,9
Physician Treatment	No answer	151	45,6
	Yes	99	29,9
	No	81	24,5
Access to a Physician	No answer	152	45,9
	3 or more per month	8	2,4
	1 per month	16	4,8
	1 in six months	38	11,5
	1 per year	23	6,9
	Rarely	94	28,4
Pre-Pandemic T&CM Use	No answer	129	39,0
	Yes	12	3,6
	More often	30	9,1
	Rarer	24	7,3
	Same frequency	54	16,3
	No	82	24,8

**Table 6. Participants' reasons for preferring T&CM**

	No (%)	Yes (%)
Recommendation	248 (74,9)	83 (25,1)
Considering beneficial	204 (61,6)	127 (38,4)
Considering safe	299 (90,3)	32 (9,7)
Fear of the side effects of medical treatments	322 (97,3)	9 (2,7)
Inadequacy/failure of medical treatments	310 (93,7)	21 (6,3)
Inability to access health services	326 (98,5)	5 (1,5)