

Assessment Of Adults' Use Of Complementary And Alternative Medicine Methods And Their Healthy Dietary Habits During COVID-19

COVID-19 Döneminde Yetişkinlerin Tamamlayıcı Ve Alternatif Tıp Yöntemlerini Kullanım Durumları İle Sağlıklı Beslenme Alışkanlıklarının Değerlendirilmesi

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ABSTRACT

The study aimed to investigate the dietary habits of adult individuals and their status of using complementary and alternative medicine practices during the COVID-19 pandemic. Method: In this cross-sectional and descriptive study, data was collected on general information about adult individuals, their status of using complementary and alternative medicine methods (CAMM), healthy eating habits, and their adherence to the Mediterranean diet (MEDAS) using an online questionnaire. The participants were asked if they knew about complementary and alternative medicine CAMM and two groups were formed based on their responses. The mean MEDAS score of those who stated that they were informed about CAMM (6.9±2.0) was higher than those who reported that they were not (6.5±1.8) (p<0.05). It was found out that 187 individuals who stated that they were informed about CAMM (46.6%) consumed three main meals, and 202 individuals who stated that they were not informed (61.6%) consumed two main meals (p<0.05). Among those who stated that they were informed about CAMM, 49.8% used herbal products, while 62.3% reported that they were not informed used herbal products (p> 0.05). It was observed that the majority of the two groups who stated they were and were not informed about CAMM used herbal products included in CAMM. Therefore, the results of the study emphasize the significance of consulting health experts before using CAMM and preventing their irrational use in order to curb health problems that might arise as a result of irrational use of CAMM.

Keywords: Complementary and alternative medicine, Dietary habits, Mediterranean diet, Dietary supplement

ÖZET

COVID-19 salgını süresince yetişkin bireylerin beslenme alışkanlıklarını ve tamamlayıcı ve alternatif tıp yöntemleri (TATY) kullanım durumlarını değerlendirmek amaçlanmıştır. Yöntem: Kesitsel tipteki bu çalışmada yetişkin bireylerin genel bilgileri, TATY kullanım durumları, sağlıklı beslenme alışkanlıkları ve Akdeniz diyetine bağlılıkları (MEDAS) çevrimiçi anket uygulanarak veriler toplanmıştır. Bu çalışmaya 555 kadın ve 174 erkek toplam 729 yetişkin birey (yaş ortalaması 28.9±10.9 yıl) katılmıştır. TATY hakkında bilgi sahibi olduğunu belirtenlerin ağırlıklı olarak ön lisans/lisans (%45.2), bilgi sahibi olmadığını belirtenlerin ise çoğunlukla lise (%43.6) mezunu olduğu belirlenmiştir (p<0.05). TATY hakkında bilgi sahibi olduğunu bildirenlerin ortalama MEDAS puanı (6.9±2.0), bilgi sahibi olmadığını bildirenlere (6.5±1.8) göre daha yüksek bulunmuştur (p<0.05). Katılımcıların çoğunlukla kullandıkları TATY'yi bitkisel ürünler, yoga/meditasyon ve masajdır (sırasıyla %52.2, %13.4 ve %12.6). TATY hakkında bilgi sahibi olduğunu belirtenlerin %49.8'i bitkisel ürün kullanırken, bilgi sahibi olmadığını belirtenlerin ise %62.3'ü bitkisel ürün kullanmaktadır (p>0.05). TATY bilgisi olduğunu ve olmadığını beyan eden her iki grubun çoğunluğunun TATY içinde yer alan bitkisel ürünleri kullandıkları görülmüştür. Bu nedenle, bu çalışmanın sonuçları; TATY'nin bilinçsiz kullanım sonucu oluşabilecek sağlık sorunlarını azaltmak amacıyla, kullanım öncesinde sağlık uzmanlarına danışılmasının ve bilinçsiz kullanımın önüne geçilmesinin önemini vurgular niteliktedir.

Anahtar kelimeler: Tamamlayıcı ve alternatif tıp, Beslenme alışkanlıkları, Akdeniz diyeti, Besin destek

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INTRODUCTION

Although World Health Organization (WHO) defines alternative and complementary medicine as a set of health care practices that are not part of that country's tradition or conventional medicine and are not fully integrated into the dominant healthcare system, in some other definitions and studies, alternative, complementary and traditional medicine are used interchangeably in some countries (WHO, 2021; Ben-Arye et al., 2008; Vohra et al., 2005). Studies conducted in Turkey show that especially the individuals with chronic diseases prefer complementary and alternative medicine methods with a rate ranging from 22.1% to 84.1% (Kav et al., 2008; Kurt et al., 2013). According to a study, most common complementary or alternative medicine practices in Turkey are herbal products, relaxation, hypnosis, acupuncture, yoga-meditation, massage, music, reflexology, cryotherapy and aromatherapy, respectfully (Özçelik-Fadıoğlu, 2009). For more than a year, the COVID-19 pandemic has become a significant threat towards health systems in Turkey and all around the World. The prevention of the disease and strengthening the immunity of individuals proved to be vital as well as the treatment and vaccination efforts having the primary importance. Studies confirmed that the elderly, people with chronic diseases and people without optimal nutrition levels face severe symptoms if they contract the disease, that these patients have a more extended hospitalization period in intensive care, more distinctive decay in their muscle mass and quality of life and higher rates of morbidity and mortality (Zhou et al., 2020; Huang et al., 2020; Singer et al., 2019). In suggestions on lifestyle changes and nutritional advice for healthy adults during COVID-19 pandemic, advice on sufficient and balanced nutrition such as increasing the consumption of fresh fruit and vegetables, dry legumes, whole grain products and oily seeds, healthy oils and water are listed while the people are advised against consuming salt, food with added sugar or eating out. These suggestions also advise healthy adults to maintain ideal body weight and adopting to the Mediterranean diet during the quarantine (Barrea et al., 2020). Although the use of complementary or alternative medicine applications in this period has not proved to be effective scientifically, the effectiveness of these methods in the prevention and treatment of COVID-19 is being studied in some countries such as China and India (Shankar et al., 2020). The study was designed and carried out to investigate the dietary habits of adult individuals and their status of using complementary and alternative medicine practices during the COVID-19 pandemic.

METHOD

This is a cross-sectional and descriptive study that investigates adult individuals' status of using complementary and alternative medicine practices and their healthy eating habits during COVID-19 pandemic. This study was carried out between January and April 2021 among adult individuals aged between 18-65 living in

Istanbul and Ankara, which received the questionnaire through online environment.

The study population consists of adult individuals aged between 18-65 living in Istanbul and Ankara. When selecting the sample, non-probability-based haphazard sampling method was used. It was planned that a total of 462 individuals out of the population aged between 18-65 would be included in the study after making the calculations. The study was completed with 729 adult individuals in order to increase the representative power of the sample universe.

The data collection form consists of three sections and a total of 58 items. Study data were collected through an electronic questionnaire. Following the literature review, the researcher prepared questions related to the general information about the individuals and their use of complementary and alternative medicine applications. The nutritional habits of the participants were evaluated through a seven-item Mediterranean Diet Adherence Screener (MEDAS).

The section on general information about individuals consists of 22 items. The questions in this section inquire about participants' socio-demographic information (age, gender, marital status), their health history, anthropometric information (height, weight) and smoking and alcohol habits. The height and bodyweight of individuals participating in the study were collected from their own statements. The researchers calculated the body mass index (BMI) by dividing the body weight (kg) by the square of body height (m^2) and it was assessed in line with the BMI classification designated by the WHO (WHO, 2021).

In the complementary or alternative medicine applications section, there are 22 questions related to participants' frequency of using complementary or alternative medicine methods. The questions were prepared in line with the literature review (Şahin et al., 2019; Biçer et al., 2019).

The Mediterranean Diet Adherence Scale (MEDAS) was developed by Schroder et al. in 2011 and adapted to Turkish by Özkan Pehlivanoglu et al. in 2020. MEDAS questions consumption habits of foods in two items and food consumption frequency in 12 items. Each item is scored as either zero or one. When the most frequently consumed fat type is olive oil and when white meat is preferred over red meat, one point is given. Participants who consume food that are frequently consumed in Mediterranean basin, such as olive oil, vegetables, fruit, legumes, oily seeds, fish and wine more than the decided amount get one point, while participants who do not get zero. Participants who consume food that is consumed in smaller amounts in Mediterranean countries such as red meat, butter, margarine, cream, sugary/carbonated drinks less than the decided amount get one, while participants who consume more of this type of food get zero. The total score ranges between 0 and 14. The higher the score is, the higher the commitment to the Mediterranean diet gets. A total score of <7 shows a low adherence, 7-8 points prove a medium adherence, and ≥ 9 proves a high adherence to the diet. Özkan Pehlivanoglu et



al. confirm Turkish adaptation of Mediterranean Diet Adherence Screener as reliable in their study (Cronbach Alpha coefficient= 0.83) (Martínez-González et al., 2012; Pehlivanoglu et al., 2020).

Statistical analyses were performed using SPSS (IBM Statistics 24) package software. To interpret the findings, frequency tables and descriptive statistics; to evaluate the relationships of two qualitative variables “Pearson-χ² matrix tables” were used. “Mann Whitney U” test (Z-table value) was utilized to compare measurement values with two independent groups that do not display normal distribution.

Ethical approval for this study was obtained from Ankara Yıldırım Beyazıt University Ethics Review Board with Project number 2020-428 on 14.02.2021. The study was performed by obtaining the informed consent of the participants.

RESULTS

The participants were asked if they knew about complementary and alternative medicine methods (CAMM) and two groups were formed based on their responses. Age median of 306 female and 95 male participants who stated that they are informed about CAMM is 29.7±10.7 years while the age average for 249 female and 79 male participants who reported that they are not informed is 26.8±9.3 years. Age median of participants who stated that they are informed about CAMM is significantly higher than the median age of the uninformed group (p<0.05) (Table 1).

It was decided that the participants informed about CAMM had associate's/bachelor's degree (45.2%) predominantly, while uninformed participants were mainly high school graduates. This proved a statistically significant relationship between being informed about CAMM and the level of education (p<0.05). It was found out that 164 individuals who stated that they were informed about CAMM (40.9%) were employees and 208 individuals who indicated that they were not informed (63.4%) were students (p<0.05) (Table 1).

Table 1: Evaluation of demographic characteristics and health status according to being informed about CAMM

	CAMM Information (+) (n=401)		CAMM Information (-) (n=328)		Total (n=729)		Z	p*
	$\bar{X} \pm SS$	Median [Min-Max]	$\bar{X} \pm SS$	Median [Min-Max]	$\bar{X} \pm SS$	Median [Min-Max]		
Age (year)	29.7±10.7	24.1 [18.3-64.5]	26.8±9.3	22.1 [18.3-64.6]	28.9±10.9	23.0 [18.3-57.8]	-4.159	0.000
	n	%	n	%	n	%	χ²	p**
Sex								
Female	306	76.3	249	75.9	555	76.1	0.015	0.901
Male	95	23.7	79	24.1	174	23.9		
Level of education								
Primary/Secondary school	5	1.2	11	3.4	16	2.2		
High school	138	34.4	143	43.6	281	38.5	14.317	0.003
Associate's/Bachelor's	181	45.2	135	41.2	316	43.4		
Postgraduate	77	19.2	39	11.8	116	15.9		
Profession								
Student	210	52.4	208	63.4	418	57.3		
Working	164	40.9	103	31.4	267	36.7	8.999	0.011
Unemployed	27	6.7	17	5.2	44	6.0		
Coexistent disease								
Yes	93	23.2	63	19.2	156	21.4	1.703	0.192
No	308	76.8	265	80.8	573	78.6		
Disease diagnosis ***								
Rheumatological	11	10.4	5	6.7	16	8.8		
Allergy/asthma	18	17.0	19	25.3	37	20.4		
Endocrinological	21	19.8	18	24.0	39	21.6		
CVD	21	19.8	11	14.7	32	17.7	7.196	0.303
Cancer	3	2.8	1	1.3	4	2.2		
Other	32	30.2	21	28.0	53	29.3		
Contracting COVID-19								
Yes	40	10.0	21	6.4	61	8.4		
No	327	81.5	280	85.4	607	83.2	3.081	0.214
Quarantine period	34	8.5	27	8.2	61	8.4		

* Mann-Whitney U, ** Pearson-χ² cross tables, *** More than one answer to the question, CVD: Cardiovascular Disease



BMI average among women who stated that they were informed about CAMM (n=306) is 22.4±4.3 kg/m²; while BMI is 21.9±3.5 kg/m² for women who reported that they were not informed about it (n=249). The average BMI of males who stated that they are informed about CAMM (n=95) is 26.4±3.9 kg/m²; while the average is 26.2±3.2 kg/m² for males who did not (n=79) (p>0.05).

BMI median of participants who reported that they were informed about CAMM is 23.4±4.5 kg/m², and the average BMI of uninformed participants is 22.9±3.9 kg/m², which

did not display a significant difference between BMI values and their being informed or not (p>0.05). It was found that 95 participants who reported being informed about CAMM (23.7%) and 56 participants who denied being informed (17.1%) smoked, and that the rate of being informed is higher among smokers (p<0.05). It was found out that 187 individuals who stated that they were informed about CAMM (46.6%) consumed three main meals, while 202 individuals who stated that they were not informed (61.6%) consumed two main meals (p<0.05) (Table 2).

Table 2: Evaluation of anthropometric measurements, lifestyle and nutritional habits according to being informed about CAMM

	CAMM Information (+) (n=401)		CAMM Information (-) (n=328)		Total (n=729)		Z	p*
	$\bar{X} \pm SS$	Median [Min-Max]	$\bar{X} \pm SS$	Median [Min-Max]	$\bar{X} \pm SS$	Median [Min-Max]		
BMI (kg/m²)	23.4±4.6	22.6 [14.8-41.0]	22.9±3.9	22.6 [16.0-37.0]	23.2±4.3	22.7 [14.8-41.0]	-0.899	0.369
	n	%	n	%	n	%	χ²	p**
BMI classification								
Underweight	40	10.0	29	8.8	69	9.5		
Normal weight	227	56.6	206	62.8	433	59.4	5.115	0.276
Overweight	97	24.2	75	22.9	172	23.6		
Obese	37	9.2	18	5.5	55	7.5		
Body weight in the pandemic								
Increased	172	42.9	123	37.5	295	40.5		
Decreased	109	27.2	80	24.4	189	25.9	5.435	0.066
Did not change	120	29.9	125	38.1	245	33.6		
Smoking								
Yes	95	23.7	56					
No	306	76.3	272	17.1 82.9	151 578	20.7 79.3	4.811	0.028
Alcohol use								
Yes	93	23.2	65	19.8	158	21.7		
No	308	76.8	263	80.2	571	78.3	1.211	0.271
Number of main meals								
1	6	1.5	4	1.2	10	1.4		
2	208	51.9	202	61.6	410	56.2	6.920	0.031
3	187	46.6	122	37.2	309	42.4		
Number of snacks								
Non-consuming	16	4.0	18	5.5	34	4.7		
1	125	31.2	112	34.1	237	32.5		
2	177	44.1	138	42.1	315	43.2	2.398	0.663
3	69	17.2	52	15.9	121	16.6		
4	14	3.5	8	2.4	22	3.0		
Skipping the main meal								
Yes	247	61.6	209	63.7	456	63.7		
No	154	38.4	119	36.3	273	36.3	0.347	0.556
Reason for skipping meals***								
Lack of time	56	19.2	53	20.9	109	20.0		
Being unwillingness	118	40.4	104	40.9	222	40.6		
Willing to lose weight	20	6.8	18	7.1	38	7.0	0.482	0.975
Not used to	85	29.1	69	27.2	154	28.2		
Having a late breakfast	13	4.5	10	3.9	23	4.2		

* Mann-Whitney U, ** Pearson-χ² cross tables, *** More than one answer to the question.



The mean MEDAS score of those who stated that they were informed about complementary and alternative medicine methods (6.9 ± 2.0) was statistically significantly higher than those who reported that they were not informed (6.5 ± 1.8) ($p < 0.05$). It was found out that 161 individuals who stated that they were informed about CAMM (40.1%) and 164 individuals who stated that they were not informed (50.0%)

showed a low adherence to the Mediterranean diet. It was determined that people who showed low and medium adherence to the Mediterranean diet primarily were not informed about CAMM, and those who showed a high adherence predominantly reported that they were informed about it ($p < 0.05$) (Table 3).

Table 3: Evaluation of adherence to the Mediterranean diet according to being informed about of CAMM

	CAMM Information (+) (n=401)		CAMM Information (-) (n=328)		Total (n=729)		Z	p*
	$\bar{X} \pm SS$	Median [Min-Max]	$\bar{X} \pm SS$	Median [Min-Max]	$\bar{X} \pm SS$	Median [Min-Max]		
MEDAS score	6.9 ± 2.0	7.0 [2.0-12.0]	6.5 ± 1.8	6.5 [1.0-11.0]	6.7 ± 1.9	7.0 [1.0-12.0]	-3.122	0.002
	n	%	n	%	n	%	χ^2	p**
MEDAS classification								
Low (<7)	161	40.1	164	50.0	325	44.6		
Medium (7-8)	149	37.2	124	37.8	273	37.4	15.013	0.001
High (≥ 9)	91	22.7	40	12.2	131	18.0		

* Mann-Whitney U, ** Pearson- χ^2 crosstabs

It was found that 115 participants who reported being informed about CAMM (%28.6) had applied it in the past as due to an illness, while 265 individuals who reported being uninformed (%80.5) had never utilized CAMM ($p < 0.05$). It was seen that people who had previously applied and still applying CAMM were predominantly informed about it, while those who had never used it were not informed (Table 4).

Considering the reasons of application, 158 individuals who reported being informed about CAMM (%36,5) stated that they used it to strengthen their immune system and 108 (%24.9) used it for physical/psychological relaxation; while 37 individuals who stated being uninformed (%27.0) reported they used it to boost their immune system and (%21.2) thought it is good for illnesses ($p < 0.05$) (Table 4).

Out of all the participants who stated being informed about CAMM, 49.8% used herbal products. The rate for the participants who were uninformed and had used herbal products before is %62.3. There were no statistically significant differences between these two groups ($p > 0.05$) (Table 4).

It was determined that 340 (%84.8) individuals that reported being informed about complementary and alternative medicine methods thought that CAMM has beneficial effects on their health, and 112 individuals who reported that they were uninformed about CAMM (%37.2) did not know about CAMM's effects on their health. It was observed that people who were informed about CAMM mainly were aware of CAMM's health benefits, while people who did not know the health benefits of CAMM were also not informed about CAMM ($p < 0.05$) (Table 4).

**Table 4: Evaluation of CAMM usage habits and being informed about CAMM**

	CAMM Information (+) (n=401)		CAMM Information (-) (n=328)		Total (n=729)		χ^2	p*
	n	%	n	%	n	%		
Using CAMM for disease								
Used in the past	115	28.6	51	15.5	166	22.8	71.151	0.000
Still using	78	19.5	13	4.0	91	12.5		
Never used	208	51.9	264	80.5	472	64.7		
Reason for using CAMM**								
Thinking that it is beneficial for the disease	60	13.9	30	21.9	90	15.8	24.993	0.000
Inadequacy of medical treatment alone	15	3.5	13	9.5	28	4.9		
Reducing the side effects of drugs	31	7.2	8	5.8	39	6.8		
Boosting immunity	158	36.5	37	27.0	195	34.3		
Last resort for chronic disease	8	1.8	9	6.6	17	3.0		
Reducing pain	53	12.2	11	8.0	64	11.2		
Physical/psychological relaxation	108	24.9	29	21.2	137	24.0		
CAMM used**								
Herbal products	163	49.8	48	62.3	211	52.2	6.317	0.389
Aromatherapy	25	7.6	3	3.9	28	6.9		
Massage	44	13.5	7	9.1	51	12.6		
Acupuncture	27	8.3	7	9.1	34	8.4		
Yoga. meditation	47	14.4	7	9.1	54	13.4		
Vitamin-mineral	12	3.7	4	5.2	16	4.0		
Cupping	9	2.7	1	1.3	10	2.5		
Health impact of CAMM								
Positive	340	84.8	196	59.8	536	73.5	60.118	0.000
Negative	2	0.5	1	0.3	3	0.4		
No effect	6	1.5	9	2.7	15	2.1		
He/she does not know	53	13.2	122	37.2	175	24.0		

* Pearson- χ^2 crosstabs, **More than one answer given to the question.

DISCUSSION

While complementary and alternative medicine methods vary across each society in philosophical, cultural and religious aspects, their use also changes according to modern medical practices. In Turkey, the integration process of modern medicine and CAMM is still ongoing (Güngörmüş-Kıyak, 2012). Individuals' dietary habits and their status of tending towards CAMM during the COVID-19 pandemic vary in terms of samples (Özyıldırım et al., 2019). In this study, the individuals themselves stated that they were not informed about CAMM. Numerous studies carried out on this area in the literature and the mean age and sex distribution in this study show similarities (Ergin et al., 2011; Midilli et al., 2016; Arı-Yılmaz, 2016). When the educational levels of the participants are examined, it is seen that high school and bachelor graduates are the majority. Educational levels were found to be significant between the two groups. Similarly, it was seen that most of the studies in the literature were carried out with students at a specific educational level, students enrolled at the faculty of medicine and/or health sciences, faculty member or healthcare personnel (Özyıldırım et al., 2019; Ergin et al., 2011; Doğanay et al., 2018; Bjerså et al., 2012). In studies carried

out in Turkey, it was seen that patients of oncology, endocrinology, cardiology and dermatology used CAMM the most (Kav et al., 2008). It was determined that some of the individuals participating in this study were diagnosed with diseases such as rheumatic, endocrinologic, and cardiovascular diseases, allergy/asthma and cancer, which was not found to be significant when compared with their status of being informed about CAMM. İpek et al. found a significant relationship between the rate of people with hypertension, coronary artery disease, cardiovascular diseases and multiple chronic diseases and being informed about CAMM thus using it (Table 1) (İpek et al., 2013).

Although the link between COVID-19 pandemic and obesity, it was determined that the disease causes individuals with high BMI values to experience severe symptoms, stay hospitalized for longer periods of time and at a higher frequency (Cai et al., 2020a; Cai et al., 2020b; Petrilli et al., 2020; Simonnet et al., 2020). Preventive restrictions limited physical activities during the pandemic (Dilber-Dilber, 2020). The number of studies on CAMM and weight loss is insufficient. However, public awareness towards obesity and related health issues and social pressure on body image resulted in increased popularity of CAMM activities



(Esteghamati et al., 2015). Participants in this study are within the normal BMI range and there were no significant differences compared to whether they were informed about CAMM.

Furthermore, when the participants were asked to evaluate the change in their weight so far since the outbreak began, almost half stated that they had an increase in their body weight; however, there were no significant differences between their statements on weight change and being informed about CAMM. In another study similar to this one, it was found that 61% of the sampling had a bodyweight increase during the pandemic. When individuals were asked about the number of meals they consume a day, their reply was two meals (Dilber-Dilber, 2020). It is thought that in addition to disruption on daily and sleep habits, individuals also had fewer meals due to a decrease in their frequency of physical activities (Table 2).

The effects of nutrition on health have been a popular topic for many years. Today, many unhealthy nutritional habits due to individual or environmental reasons increase the risk for many chronic diseases. Considering the effects of nutrition on health, the importance of food variety is emphasized. Mediterranean diet stands out among the healthiest nutritional models due to the variety it consists of (Pehlivanoglu et al., 2020; Barbaros-Kabaran, 2014). In this study, although MEDAS score average proved a significant correlation between two groups, it was determined that most of the sampling displayed low or medium adherence in MEDAS classification. The changes in traditional dietary habits, the availability of high-calorie food and less physical activity increases the prevalence of type 2 diabetes, obesity, hypertension and coronary artery diseases (Bayram-Aktaş, 2018).

Although there are many successful and major advances in the diagnosis and treatment of diseases in terms of medicine, CAMM usage is becoming more and more common. CAMM is the sum total of health care methods, practices and products that are used in the improvement and maintenance of health, prevention and control of illnesses and in diminishing their symptoms. The reasons for individuals' CAMM applications depend on their perception of health, traditional health beliefs, their health history, cultural factors and way of life (Çakmak-Nural, 2017). The study by Doğanay et al. (2018) investigated the status of individuals' using CAMM for diseases. Of all the individuals in this mentioned study, 63% stated that they had never used it and a significant relationship was found similar to the results from this study (64.6%). In this same study, while the reasons for using CAMM was listed as relaxation, treatment, easement of pain, supplement and prevention (Doğanay et al., 2018), Midilli et al. (2016), found supplement, relaxation, prevention and treatment as the motives. In this study, the reasons for using CAMM were determined as increasing immunity, physical and psychological relaxation, regarding it beneficial for illnesses, easement of pain, respectfully. The difference between groups were found significant (Midilli et al., 2016). The reason for the order could be the absence of medical treatment despite

vaccination efforts against the novel COVID-19, which has affected the whole World since last year. In the same study, when individuals were asked about the method of CAMM they preferred, herbal treatment methods accounted for more than half of the sampling (Midilli et al., 2016).

Result and Recommendations

The use of CAMM is becoming more common in our country as it is in the rest of the World. The tendency towards CAMM usage increased during the COVID-19 pandemic mainly in order to strengthen immunity and prevention of the disease. It was observed that the majority of the two groups who stated they were and were not informed about CAMM used herbal products included in CAMM. Although the data was obtained from highly educated people living in two metropolises in Turkey, many studies on the subject proved that the general tendency in the whole country towards using CAMM is increasing. Therefore, the results of the study emphasize the significance of consulting health experts before using CAMM and preventing their irrational use in order to curb health problems that might arise as a result of the irrational use of CAMM. More research should be planned to study the reliability and the effects of CAMM and to obtain evidential data. Establishing research centers and enabling postgraduate studies at related departments of universities focusing on this topic can be encouraged.

Study limitations

The limitation of the study is that the data on anthropometric measurements of the participants were collected based on their own statements.

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