# From Whom did you Receive This Information?(A study on using complementary and alternative medicine (CAM) methods in elderly individuals)

Objective: This study was planned to determine elderly patients' statuses of using complementary and alternative medicine

Material and Method: After receiving the necessary permissions, the study was carried out with 400 participants at or over the age of 65 who visited the polyclinics of a state hospital. Questionnaires were applied by the researchers with the face-to-face interview method, and the data were collected between 1 January 2018 and 1 January 2019. For data collection, a 22-question questionnaire form that was developed by the researchers based on the literature was utilized. The data were analyzed by

using "SPSS 20.0 for Windows"; arithmetic means and standard deviations for the measurement values and percentages for the counted values were calculated. Chi-squared test was used to determine the significance of the difference between the two

Results: All sociodemographic variables were found to be significant regarding the elderly participants' usage of CAM practices (p≤0.05). Herbal therapies were the most frequently preferred CAM method (87.9%); the participants used CAM for the purpose of improving general health status by 91.3%, and 82.6% of them learned about these methods from other users (relatives,

Conclusion: While CAM practices, which are among the current treatment concepts today, are increasingly abundant; the responsible performance of these practices requires a knowledge base. For this reason, healthcare personnel should have sufficient knowledge about CAM methods, follow scientific developments/updates about CAM and inform and guide their

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**ABSTRACT** 

friends, neighbors, etc.).

patients regarding CAM practices/updates.



(CAM), why they prefer these methods and their attitudes towards CAM.

groups; while p<0.05 was accepted to be statistically significant.

Keywords: Aged, complementary therapies, attitude, knowledge bases, health personnel

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Bu Bilgiyi Kimden Aldın? (Yaşlı bireylerde tamamlayıcı ve alternatif tedavi (TAT) yöntemleri kullanımı hakkında bir araştırma)

ÖZET

Amaç: Bu çalışma yaşlı hastaların tamamlayıcı ve alternatif tedaviyi (TAT) kullanma durumlarını, neden bu yöntemleri tercih ettiklerini, tamamlayıcı ve alternatif tedaviye ilişkin tutumlarını belirlemek amacıyla planlanmıştır.

Materyal ve Metot: Çalışma gereken izinler alındıktan sonra bir devlet hastanesi polikliniklerine başvuran 65 yaş ve üzeri 400 katılımcı ile yürütülmüştür. Anketler araştırmacılar tarafından yüz yüze görüşme tekniği ile uygulanarak veriler 1 Ocak 2018-1 Ocak 2019 tarihleri arasında toplanmıştır. Verilerin toplanması için araştırmacılar tarafından literatüre dayalı hazırlanan 22 soruluk anket formu kullanılmıştır. Araştırmadan elde edilen veriler "SPSS 20.0 for Windows" programı kullanılarak analiz edilmiş, ölçümsel değerler aritmetik ortalama, standart sapma ve sayımla belirlenen değerler sayı yüzde olarak hesaplanmıştır. İkili gruplardaki anlamlılığın hesaplanması için ki-kare testi, karşılaştırmalarda p<0.05 değeri istatistiksel olarak anlamlı kabul

Bulqular: Yaşlıların TAT uygulamalarını kullanımına ilişkin sosyodemografik değişkenlerin tamamı istatistiksel olarak anlamlı bulundu (p≤0.05). Yaşlı bireylerin kullanmayı en çok tercih ettikleri TAT yönteminin bitkisel terapiler (%87.9), kullanma amaçlarının %91.3 oranında genel sağlık durumunu iyileştirmek ve yöntemi %82.6 oranında diğer kullanıcılardan (eş, dost, akraba, komşu vb.) öğrendikleri saptandı.

Sonuç: Günümüzde güncel tedavi kavramı içerisinde yer alan TAT uygulamaları giderek artış göstermekle birlikte bu uygulamaların bilinçli yapılabilmesi bazı temel bilgi birikimini gerektirmektedir. Bu sebeple sağlık personelleri TAT yöntemleri hakkında yeterli bilgiye sahip olmalı, TAT konusunda bilimsel gelişmeleri takip etmeli ve hastalarını TAT uygulamaları hakkında bilgilendirmeli ve rehberlik etmelidir.

Anahtar Kelimeler: Yaşlı, tamamlayıcı terapiler, tutum, bilgi düzeyi, sağlık personeli

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umanity has used complementary therapies, which are defined as methods that are applied in parallel with modern medicine since the day it existed for gaining health. According to archeological findings remaining from the first ages, people have firstly utilized plants to overcome various health problems (1). As it is affected by several different cultures that exist in the world, the meaning of complementary and alternative medicine (CAM) may vary from country to country, physician to physician and even patient to patient (2). Although the concepts of complementary treatment and alternative treatment have different meanings, they are frequently used together in the literature. While complementary treatment refers to methods used by patients to support modern medicine, alternative treatment includes treatments or options that are used instead of modern medical practices, and their effects are not scientifically proven (2-4). In the general sense, CAM is defined as treatments that are applied in addition to medical treatment such as traditional natural products and exercise techniques that are used by the individual to better understand themselves, their family and environment and protect their physical and mental health (5, 6). In parallel with the fast developments in the diagnoses; care and treatments of diseases starting with the mid-20th century; there has been an increase also in the usage of CAM. Indifference to the medical treatments recommended by modern medicine, usage of CAM methods is increasingly becoming prominent and prevalent worldwide (3).

While complementary treatment refers to methods used by patients to support modern medicine, alternative treatment includes treatments or options that are used instead of modern medical practices, and their effects are not scientifically proven (3, 6). Today, the most important reasons for patients to turn towards CAM include the increased lifespan and chronic diseases, difficulties in accessing high-cost treatments and new technologies, deficiencies or side effects of drugs and suspicions about treatment options. Additionally, the limited time allocated for patients by healthcare professionals is also shown as a reason that increases the frequency of using CAM (4, 5). While the frequency of using CAM methods is increasing nowadays, it is seen that patients do not inform healthcare professionals about the methods that are using. As irresponsible usage of CAM methods may decrease the effectiveness of medication treatment, it may also lead to unwanted drug interactions and side effects, increase treatment times or organ dysfunctions (5, 7, 8). For this reason, in order to prevent and control complications that may develop in elderly patients, who are the most frequently encountered patient group by healthcare professionals, it is important to question the patients' CAM usage statuses, from where they have learned it and their reasons for using it. This study was planned for determining elderly patients' statuses of using complementary and alternative medicine (CAM), why they prefer these methods and their attitudes towards CAM.

### **Material and Method**

The population of the study consisted of individuals aged 65 or older who visited the polyclinics of a state hospital between 1 January 2018 and 1 January 2019. The sample size in the study was determined based on the number of people ????unknown???? to the population with the method of single-stage random probability sampling. In the study, the required sample size was calculated with Epiinfo software as 378 based on 5% acceptable error rate, in a 95% confidence interval and with a probability of 50% that the event took place in the population. After obtaining the necessary permissions, the study was carried out with 400 participants at or over the age of 65 who visited the polyclinics of a state hospital. The participants were included in the study after they were informed, and their consent was obtained. The questionnaires were applied by the researchers with the face-to-face interview method, and the data were collected between 1 January 2018 and 1 January 2019.

The data were collected by using a 22-question questionnaire form that was prepared by the researchers based on the literature. The form consisted of two parts. The first part consisted of 7 questions on the sociodemographic characteristics of the elderly, while the second part consisted of 15 questions on the methods they used as CAM, why they preferred these methods and their knowledge, attitudes and behaviors related to these methods. Before starting the study, written permission was obtained from the Ethics Committee of Burdur Mehmet Akif Ersoy University (No: 2017/118).

#### Statistical Analysis

The data obtained from the study were analyzed by using "SPSS 20.0 for Windows", while arithmetic means and standard deviations for the measured values and percentages for the counted values were calculated. Chi-squared test was used to determine the significance of the difference between the two groups, while p<0.05 was accepted as statistically significant.

#### Results

40.5% of the participants were male, 39.8% had primary school or lower degrees, 87% were married, and 51.7% had incomes equal to their expenditures. 82.2% of the elderly (n=329) used at least one CAM method, and there was a significant (gender, education status, income level, chronic status) difference between those that used these

methods and those that did not (Table 1). The mean age of the participants was 73.3±3.1.

Table 1. Sociodemographic variables regarding the participants' usage of CAM practices							
Socio-	CAM users n=329		CAM non-users n=71		Chi-		
demographic Characteristics	Frequency	Percentage (%)	Frequency	Percentage (%)	squared (p)		
Age							
65-74	183	45.8	47	11.9	0.05		
75-84	134	33.5	20	5.0			
85 or older	12	3.0	4	1.0			
Gender							
Female	217	54.3	21	5.2	0.001		
Male	112	28.0	50	12.5	0.001		
Education Stat	us						
Literate	23	5.8	0	0.0			
Primary School	121	30.2	15	3.8	0.005		
Secondary School	96	24.0	17	4.2			
High School	51	12.7	23	5.8			
University	38	9.5	16	4.0			
Income Level							
Income less than exp.	132	33	22	5.5	0.001		
Income equal to exp.	181	45.2	26	6.5			
Income more than exp.	16	4.0	23	5.8			
Marital Status	Marital Status						
Married	236	59.0	28	7.0			
Single	2	0.5	1	0.3	0.05		
Divorced	12	3.0	6	1.5	0.05		
Widowed	79	19.7	36	9.0			
Chronic Diseas	se						
Has	268	67.0	52	13.0			
Does not have	61	15.3	19	4.7	0.001		
Family Type							
Nuclear Family	161	40.3	42	10.5	0.05		
Extended Family	81	20.2	22	5.5			
Alone	87	21.7	7	1.8			

All CAM methods that were tried by the elderly participants were considered, and it was determined that they preferred herbal therapies the most (87.9%) and they

practiced the bioenergy method the least (2.6%) (Tables 2). Participants applied these practices to improve their general health status by 91.3% (Table 3).

Table 2. CAM methods used by the participants and distributions (n=329)				
Method	Usage Rate (%)*			
Herbal therapy	87.9			
Massaging	61.2			
Cupping	40.2			
Chiropractic	24.3			
Leeching	23.6			
Bloodletting	22.1			
Ozone therapy	16.4			
Pouring lead	16.2			
Acupuncture	10.7			
Naturopathy	9.6			
Chinese medicine	8.8			
Homeopathy	8.8			
Ayurveda	7.6			
Chelation treatment	3.9			
Neural therapy	3.4			
Bioenergy	2.6			
*: The participants were allowed to select multiple options.				

Table 3. The participants' CAM usage reasons (n=329)				
Reasons	Rate (%)*			
Improving general health status	91.3			
Pain management	80.4			
Chronic medical problems	76.3			
Thinking it is harmless	60.1			
Recommendation of other users	50.9			
Being afraid of the side effects of drugs	50.7			
Dissatisfaction with medical treatment	38.6			
Because it is cheap and easily accessible	37.5			
Stress relief and relaxation	37.4			
Personal interest	21.2			
*: The participants were allowed to select multiple options.				

The participants received information on CAM methods the most from others who used the product such as friends, relatives and neighbors (82.6%) and the least from advertisement messages delivered to their mobile phones (8.4%) (Table 4).

Table 4. The participants' sources of information about CAM methods (n=329)				
Source of information on CAM methods	Rate (%)*			
Other users of the product (friends, family, neighbor, etc.)	82.6%			
Television and radio	71.7%			
Sales representatives that publicize the product	65.4%			
Internet	42.1%			
Healthcare personnel	34.9%			
Newspapers and magazines	34.2%			
Posters and billboards	17.5%			
Messages coming to mobile phones	8.4%			
*: The participants were allowed to select multiple options.				

## **Discussion**

Studies have determined that CAM usage frequency varies in the world between 9% and 80%; there are significant differences in usage rates based on sociodemographic characteristics, and these are increasingly gaining popularity (10-13). Studies in Turkey on the topic have revealed that CAM usage frequency varies between 7% and 76%, and there are significant differences between those who use CAM and those who do not, based on their demographic characteristics (11, 14). According to our results, 82.2% of our participants tried one of these methods at least once (n=329), and there was a statistically significant difference between those who used CAM methods and those who did not (n=71), based on their gender, education status, income level, chronic diseases (Table 1). In this respect, our study contributes to the CAM methods that are increasing in frequency in Turkey and the world, as well as the determination of the situation among the elderly.

According to our results, the top reason for the elderly to use CAM methods was to improve their general health status. This was followed by pain management and chronic problems (Table 3). By this aspect, our study was in agreement with the literature, and most studies have found the primary reasons of preferring CAM methods as improving general health status and pain management (15-18). In both our study and the literature, the most frequently used CAM practices were herbal therapies to achieve the aforementioned goals (Table 2) (16-21).

Today, many patients with life-threatening diseases prefer to use complementary and alternative treatment methods. The report of WHO (World Health Organization) on CAM stated that most people use CAM methods with the thought that "what is natural is safe" (22). In our study, we determined that 60.1% of the elderly participants who used CAM methods found them harmless as they are natural (Table 3).

Most studies have shown that patients do not ask for the information they want to gain on the usage of CAM methods from healthcare team members who are responsible for their treatment and care, and they rather obtain information about the issue from their relatives, friends, family and the media (10, 11, 14, 15). This showed that people do not primarily consult with healthcare personnel regarding the usage of CAM methods (23). Akıncı et al. (24) concluded that most patients were aware of CAM methods and used them, and their sources of information were mostly people around them. In the literature review of Tait et al. (25) on studies on the usage of CAM by hypertension patients, it was reported that the sources of news and information of the vast majority of patients regarding CAM methods were friends, relatives and neighbors. Other studies on CAM usage carried out with patients who had different diseases also determined that patients stated people who are not healthcare professionals as their source of information (5, 14, 20, 21, 24). If patients do not reach information about CAM practices from accurate sources, this may lead them to obtain unreliable information and gain negative health behaviors, therefore making it harder to take their disease under control. In our study, in agreement with the literature, we found that the participants obtained information related to CAM methods primarily from other individuals who used the products (friends, neighbors, relatives, etc.) (Table 4).

## **Conclusion**

While CAM practices, which are among the current treatment concepts today, are increasingly abundant, the responsible performance of these practices requires a knowledge base. CAM methods that are used among elderly patients irresponsibly and without consulting healthcare personnel are worrying for two reasons. First of all, when the communication between the patient and the physician is weak, elderly patients hesitate to share the CAM methods they are using or planning to use with healthcare personnel, and they do not state this issue. Second of all, as there is no open communication, one might not be aware of the potentially harmful interactions between the CAM method that is used and regularly used medications, and this may affect the health of the elderly person negatively. For this reason, healthcare personnel should have sufficient knowledge about CAM methods, follow scientific developments about CAM and inform and guide their patients regarding CAM practices.

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