

Evaluation of Knowledge, Attitudes and Behaviors of Older Adults Regarding the Use of Traditional Complementary Treatment for Pain *

Yaşlı Yetişkinlerin Ağrı Nedeniyle Geleneksel Tamamlayıcı Tedavi Kullanımına İlişkin Bilgi, Tutum ve Davranışlarının Değerlendirilmesi

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ABSTRACT

Objective: This descriptive study was conducted to evaluate the knowledge, attitudes and behaviors of older adults experiencing pain for any reason regarding traditional complementary treatment.

Methods: The study was collected simultaneously from a provincial center and districts in Türkiye between January 10 and March 15, 2024 by the Aging Studies Implementation and Research Center of a state university. 1286 older adults voluntarily participated in the study. Data were collected with a 30-question questionnaire prepared by the researchers and data were computer analysed.

Results: 75.27% of the older adults who participated in the study stated that they used traditional complementary treatment to relieve their pain, 81.50% stated that the method they used relieved their pain, and 36.37% stated that they used traditional complementary treatment on recommendation. When the use of traditional complementary treatment for pain in older adults was analyzed in terms of sociodemographic variables, a statistically significant difference was found in the group who used and did not use traditional complementary treatment in terms of all sociodemographic variables except for the family type variable ($p=0.07$) ($p\leq 0.05$). When the pain characteristics were compared in the group using and not using traditional complementary treatment in older adults, there was no significant difference between the two groups ($p>0.05$).

Conclusion: In conclusion, it was determined that older adults experiencing pain primarily consulted modern medicine and had a positive attitude towards traditional complementary treatment.

Keywords: Pain, Complementary Therapies, Aged, Attitude, Behavior

ÖZ

Amaç: Bu çalışma herhangi bir nedenle ağrı yaşayan yaşlı yetişkinlerin geleneksel tamamlayıcı tedavilere ilişkin bilgi, tutum ve davranışlarını değerlendirmek amacıyla tanımlayıcı olarak yapıldı.

Yöntem: Araştırma 10 Ocak – 15 Mart 2024 tarihleri arasında bir devlet üniversitesinin Yaşlılık Çalışmaları Uygulama ve Araştırma Merkezi tarafından, Türkiye’de bir il merkezi ve ilçelerinden eş zamanlı olarak toplandı. Araştırmaya 1286 yaşlı yetişkin gönüllü olarak katıldı. Veriler araştırmacılar tarafından hazırlanan 30 soruluk anket formu ile toplandı ve bilgisayar ortamında değerlendirildi.

Bulgular: Araştırmaya katılan yaşlı yetişkinlerin %75,27’si yaşadıkları ağrıyı gidermek için geleneksel tamamlayıcı tedavileri kullandığını, %81,50’si kullandıkları yöntemin ağrılarını geçirdiğini ve %36,37’si ise tavsiye üzerine geleneksel tamamlayıcı tedavileri kullandığını belirttiler. Yaşlı yetişkinlerin ağrı nedeni ile geleneksel tamamlayıcı tedavi uygulamalarını kullanımı sosyo-demografik değişkenler açısından incelendiğinde, geleneksel tedavileri kullanan ve kullanmayan grupta, aile tipi değişkeni ($p=0,07$) hariç diğer tüm sosyo-demografik değişkenler açısından istatistiksel olarak anlamlı fark saptandı ($p\leq 0,05$). Yaşlı yetişkinlerde, geleneksel ve tamamlayıcı tedavileri kullanan ve kullanmayan grupta ağrı özellikleri karşılaştırıldığında ise iki grup arasında anlamlı bir farklılığın olmadığı görüldü ($p>0,05$).

Sonuç: Sonuç olarak, ağrı yaşayan yaşlı yetişkinlerin öncelikle modern tıbbı başvurdukları ve geleneksel ve tamamlayıcı tedavilere karşı olumlu bir tutum içinde oldukları belirlendi.

Anahtar Kelimeler: Ağrı, Tamamlayıcı Tedavi, Yaşlı Yetişkin, Tutum, Davranış

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Introduction

The use of plants for therapeutic purposes is as old as the history of mankind, and thousands of years ago, people discovered the therapeutic aspect of plants and benefited from plants in order to live a healthy life.¹ Disease, diagnosis, prognosis and treatment methods have been defined with various concepts throughout human history, and the diagnosis, diagnosis and treatment methods of diseases have also differed according to the period and civilizations experienced in the historical process.^{2,3}

Treatments utilized alongside modern scientific therapies for disease management are referred to as traditional complementary treatments.^{3,4} While the concept of traditional medicine is methods applied independently or instead of conventional treatment, complementary medicine is methods applied together with conventional treatment or complementing this treatment, and these two treatment methods are defined as traditional complementary treatment.⁵

Looking at the studies in the literature, it can be said that although traditional therapies are utilized in every age range, the elderly generally have a more moderate approach to traditional therapies in the context of health characteristics in old age. Many older adults live with chronic diseases or painful symptoms that negatively affect the quality of life and health status in old age. This situation may increase the likelihood of elderly people resorting to more treatment options to improve their health status and cope with their health problems.⁶⁻⁹ Various reasons such as increasing incidence of chronic diseases and health expenditures, failure of medical treatments, side effects of medical treatments and medications increase the tendency towards traditional complementary treatment practices and the prevalence of traditional complementary treatment methods is increasing rapidly with the aging of the population. The primary reasons for the use of traditional complementary therapies in the elderly are predominantly pain and pain management.^{9,10}

Perhaps the biggest reason for this is that due to natural aging processes, the elderly population is more susceptible to chronic diseases and subsequent pain, and traditional complementary therapies offer a gentler, less side-effect-prone and more natural approach to addressing common health problems that the elderly suffer from.

The aim of this study is to evaluate the knowledge, attitudes and behaviors of older adults regarding the use of traditional complementary treatment methods in pain management. In addition, it is aimed to contribute to the understanding of the factors affecting older adults' decisions to use traditional complementary treatment methods, their reasons for using traditional complementary treatment methods, the risks they may experience when they use traditional complementary treatment methods, and their general attitudes. The results will provide important data to better understand the potential role of traditional complementary therapies in the pain management of elderly individuals and to help health professionals to provide more informed and effective guidance on this issue. Therefore, our study was designed to underline the necessity of evaluating traditional complementary treatment methods within the scope of health policies and to emphasize the importance of gaining the right health behavior in this regard.

Materials and Methods

The population of the study consists of individuals aged 65 and over living in a province of Türkiye. The population of the province aged 65 and over is 45,302 according to the address-based population registration system for 2024. In the study, the sample size was determined by non-clustered one-stage random probability sampling method based on the main population ratios. The sample size was calculated as 378 people in the Epi-info program at 5% acceptable error level, 95% confidence interval and 50%

probability of the event occurring in the main population. After obtaining the necessary permissions, the study was collected from the provincial and district centers by the Aging Studies Application and Research Center of a state university and 1286 voluntary participants were reached. The comprehensibility of the data collection forms was tested with a preliminary application on 20 people who were not included in the study and the forms were finalized. After the participants were informed about the study, their consent was obtained and they were included in the study. The study was designed as descriptive and cross-sectional type and the questionnaires were collected by the researchers with face-to-face interview technique between January 10, 2024 and March 15, 2024. A 30-question questionnaire form prepared by the researchers based on the literature was used to collect the data. The questionnaire consists of two parts. In the first part, there are 7 questions about the socio-demographic characteristics of the elderly, and in the second part, there are 23 questions about the relationship between the use of traditional complementary treatment according to the nature of the pain, why they prefer these methods and their experience, knowledge, attitudes regarding these methods. Before starting the study, ethical approval was obtained from the Non-Interventional Clinical Research Ethics Committee (No: GO/2023/78) of Burdur Mehmet Akif Ersoy University.

Type of research

The study was descriptive and cross-sectional (time-section) and the data were collected between January 10, 2024 and March 15, 2024.

Statistical evaluation

The data obtained from the study were analyzed using the "SPSS 20.0 for Windows" program, and the measured values were calculated as arithmetic mean, standard deviation and the values determined by counting were calculated as number and percentage. Chi-square test was used to calculate the significance in paired groups and $p < 0.05$ was considered statistically significant in comparisons.

Compliance With Ethical Rules

The research was conducted in accordance with the principles of the Declaration of Helsinki.

Results

When the socio-demographic characteristics of the older adults who participated in the study were examined, it was determined that 37.03% of the participants were male, 54.5% had primary school education or less, 69.51% were married, 60.34% had income equal to expenses, and 58.33% lived in a nuclear family. The average age of the participants was calculated as 75.38 ± 4.76 . It was found that 75.27% ($n = 968$) of the older adults used at least one traditional complementary treatment method due to pain and there was a statistically significant difference between the users and non-users according to socio-demographic characteristics in all variables except family type (**Table 1**).

Table 1. Socio-demographic variables related to older adults' use of traditional complementary treatment practices for pain

Socio-demographic Variables ($n=1286$)	Traditional complementary treatment method users ($n=968$, 75.27%)		Those who do not use traditional complementary treatment methods ($n=318$, 24.73%)		χ^2 (p)
	Number	Percentage (%)	Number	Percentage (%)	
Age					
65-74	546	42,45	196	15,24	0,002
75-84	338	26,28	102	7,94	
85 and above	84	6,54	20	1,55	
Gender					
Woman	604	46,96	206	16,01	0,003
Male	364	28,30	112	8,73	

Education Status					
Literate	203	15,78	22	1,72	
Primary School	371	28,84	105	8,16	
Middle School	186	14,46	86	6,68	0,004
High School	110	8,56	65	5,06	
University	98	7,62	40	3,12	
Income Level					
Income less than expenditure	292	22,71	82	6,38	
Income equal to expenditure	582	45,26	194	15,08	0,001
Income more than expenditure	94	7,31	42	3,26	
Marital Status					
Married	678	52,72	216	16,79	0,003
Single	290	22,55	102	7,94	
Chronic Disease					
There is	706	54,89	244	18,97	0,0001
No	262	20,38	74	5,76	
Family Type					
Nuclear Family	608	47,28	142	11,05	
Extended Family	138	10,74	72	5,59	0,07
Alone	222	17,26	104	8,08	

In the study, it was observed that the participants stated that their pain was relieved to a great extent as a result of the use of traditional complementary treatment (81.50%), and 36.37% of them used traditional complementary treatment options to try on recommendation (**Table 2**).

Table 2. Distribution of the effect of traditional complementary treatment methods on pain and reason for use in older adults (n=968)

The effect of the use of traditional complementary treatment methods on pain and its cause	Number (n)	Percentage (%)
Effect on pain		
Passed	789	81,50
Did not pass	179	18,50
Reason for use		
Because medical practices do not cure	198	20,45
Because it was advertised everywhere, because I came across it.	101	10,43
To try on recommendation	352	36,37
Because previous trials have been good	108	11,16
To get rid of the side effects of medicines	128	13,22
Because health personnel recommended it	81	8,37

Among older adults with pain associated with chronic diseases, 68.28% used traditional complementary therapies, 55.52% of pain was mostly localized in the leg-knee region, 89.58% of older adults first consulted a doctor in painful situations, and 90,05% received information about painkillers from health personnel and 86.24% used the medication recommended by the doctor in painful situations, and when a comparison was made according to pain characteristics, it was determined that there was no statistically significant relationship between older adults who used traditional complementary therapies and those who did not use traditional complementary therapies ($p>0.05$) (**Table 3**).

Table 3. Comparison of pain characteristics and use of traditional complementary treatment methods in older adults (n=1286)

Pain Features	Traditional complementary treatment users (%) (n=968)	Not using traditional complementary therapies (%) (n=318)	x ² (p)
Relation of the pain experienced to a chronic disease			
Yes	878 (%68,28)	291 (%22,62)	>0,05
No	90 (%6,99)	27 (%2,11)	
The place with the most pain			
Head	92 (%7,16)	23 (%1,78)	>0,05
Back-Waist	142 (%11,04)	66 (%5,14)	
Leg-Knee	546 (%42,45)	168 (%13,07)	
Arm-shoulder	90 (%7,00)	28 (%2,18)	
Abdomen	55 (%4,28)	15 (%1,16)	
Tooth	43 (%3,35)	18 (%1,39)	
Visiting a doctor when experiencing pain			
Yes	889 (%69,12)	263 (%20,46)	>0.05
No.	79 (%6,14)	55 (%4,28)	
Consultation with health personnel about painkillers			
Yes	892 (%69,37)	266 (%20,68)	>0.05
No.	76 (%5,90)	52 (%4,05)	
Do not take the medicine prescribed by the doctor when in pain			
Yes	823 (%64,00)	286 (%22,24)	>0.05
No.	145 (%11,28)	32 (%2,48)	

It was found that the older adults who participated in the study had positive knowledge and attitudes about traditional complementary treatment methods, such as strengthening the immune system, supporting medical treatments, having fewer side effects, and being worth trying before going to the doctor (**Table 4**).

Table 4. Knowledge, attitudes and behaviors regarding the use of traditional complementary therapies (n=1286)

Knowledge, attitudes and behaviors regarding traditional complementary treatment* (n=1286)	Yes Number (n)	Yes Percentage (%)
Traditional complementary therapies strengthen the body's immune system	798	62,05
The use of traditional complementary therapies appropriate to the diseases provides well-being and benefits	822	63,91
The use of traditional complementary therapies supports medical treatments		
Those who use traditional complementary treatment methods should tell their doctor about the products they use when they consult a doctor for any reason	902	70,13
The use of traditional complementary therapies is cheaper than medical treatments	981	76,28
Traditional complementary treatment has fewer side effects for the human body	265	20,60
Positive thinking can help us overcome minor illnesses	990	76,98
Traditional complementary therapies should be subjected to more scientific testing	1123	87,32
Traditional complementary therapies can be dangerous by preventing people from receiving complete treatment	382	29,70
Symptoms of an illness can be exacerbated by depression	544	42,30
Traditional complementary therapies can only be used as a last resort when modern medicine offers no solution	1008	78,38
If people experience a series of stressful events, they are likely to get sick	184	14,30
It is worth trying traditional complementary treatment methods before going to the doctor	1214	94,40
Traditional complementary therapies should only be used for minor ailments and should not be used to treat more serious illnesses	1022	79,47
Traditional complementary therapies should be used in consultation with a doctor or healthcare professional	436	33,90
Products used for traditional complementary therapies can interact with regular medicines to create a toxic effect	374	29,08
	368	28,61

*Participants were allowed to select more than one option

Discussion

In this study, which was conducted to evaluate the knowledge and attitudes of the elderly regarding the use of traditional complementary treatment for pain, the mean age of the older adults participating in the study was 75.38 ± 4.76 and 37.03% were male. In the study conducted by Sayın Kasar et al., the mean age was 71.84 ± 6.32 and 33.1% were male, in the study conducted by Erdoğan et al., the mean age was 71.86 ± 6.70 and 38.3% were male, in the study conducted by Say Şahin, the mean age was 73.3 ± 3.1 and 40.5% were male and the findings were similar.^{7,11,12} In addition, Eisenberg and colleagues from Harvard University conducted a systematic survey study on the use of practices other than modern medicine in 1993, and according to the results of the study, one third of the 1539 people surveyed were found to use Complementary and Alternative Medicine (CAM) practices to treat their chronic diseases.¹³

In many studies in the literature, it has been stated that the elderly use any CAM method in their lives.^{11,15-18} However, it has been found in studies that the majority of the elderly use at least one of the traditional complementary treatment methods to manage and alleviate pain, that the most commonly treated health problems with these methods are 44.4% arthritis and 23.5% chronic pain, and that the elderly with more severe knee pain or stiffness use more traditional complementary therapies.^{19,20,34} In our study, it was determined that 75.27% (n=968) of the elderly used at least one traditional complementary treatment method due to pain, and our findings are similar to the studies in the literature.

In most of the studies in the literature, it was stated that the majority of the elderly benefited from traditional complementary treatment methods, that their satisfaction with complementary methods was high, that they were very helpful for their health and health problems, and that the method used had no harm or side effects.^{11,12,31} In our study, 81.50% of the elderly were found to have pain relief as a result of the use of traditional complementary treatment, and in this respect, we can say that the findings we obtained in our study are similar to the studies in the literature.

The literature has reported reasons for using more than one CAM in older adults. Some studies have found that older adults most often use CAM after hearing about its benefits from patients with the same condition and on the recommendation of other users.^{7,21} Some studies have also found that older adults use CAM methods mostly because they have fewer side effects, are afraid of the side effects of medications, do not benefit from medical treatment, are not satisfied or do not get a response, find their current treatment inadequate, and contribute to the current treatment.^{7,10,12,18,22} Also, protecting general health, staying healthy, living healthy and treating a health condition, relieving pain due to a chronic disease or symptom, pain management and symptom management are the most common reasons why the older adults use CAM.^{20,23,24,31} In our study, when the reasons for using traditional complementary treatment were evaluated in general, it was found that the reasons were similar to the findings in the literature and the elderly stated that they mostly used traditional complementary treatment methods to try traditional complementary treatment methods on recommendation and this rate was found to be 36.37%.

In the studies in the literature, it has been stated that the majority of the elderly have chronic diseases, they know traditional complementary treatment methods, they use traditional and complementary medicine methods, they regularly comply with treatment plans, they use medication depending on their chronic diseases, and they use the most common herbal products and medicines in addition to medication use.^{14,24,25} In the study conducted by Özsüreççi et al., pain ranked first with 19.5% among the complaints of the elderly applying to traditional complementary treatment practices.¹⁰ In our study, it was found that 68.28% of older adults with pain associated with chronic diseases used traditional complementary treatment methods, and in this respect, similar findings were obtained with the studies in the literature. However in the study conducted by Sayın Kasar et al., 25.8% of the elderly used traditional complementary treatment

methods for pain, and compared to the findings we obtained in our study, there are also findings in the literature that fewer elderly people use traditional complementary treatment for pain.¹¹

Studies in the literature have reported that elderly people experience pain mostly in the leg and knee region.^{11,26-29} In our study, it was found that pain was localized mostly in the leg-knee region with a rate of 55.52% in older adults and similar results were obtained to the studies in the literature. In the studies conducted in the literature, it was found that the extremities were the most common site of pain in the elderly, musculoskeletal disorders were the most frequently reported medical disorders, back or neck pain was among the most common chronic problems, and chiropractic was the most commonly used form of traditional complementary treatment.^{18,30-32}

Different findings were obtained in the studies in the literature on the status of informing health professionals about the traditional complementary treatment method used, and it was reported that 97.5% of the elderly did not provide information in one study and 69.2% of the elderly did not provide information in another study.^{21,33} However, in the study conducted by Shreffler-Grant et al., 60% of the elderly stated that they told their regular primary care providers that they benefited from complementary methods, and 76.28% of the elderly who used traditional complementary treatment stated that the products they used should be told to their doctors when they consulted a doctor for any reason.³¹ In the study conducted by Ayele et al., it was found that 72.5% of the elderly did not have any knowledge and awareness of drug-herb interaction, and this was also found in our study, and 28.61% of the elderly stated that the products used for traditional complementary treatment could interact with drugs and create a poison effect. Therefore, the awareness of the elderly that the products used for traditional complementary treatment may interact with the drugs used was realized at low levels.³³

Conclusion

Even though traditional complementary therapies are frequently used in the world and in our country, it is controversial how useful these methods are because the beliefs, knowledge and facts about these practices are generally different from each other and the opportunity to conduct adequate research in this field is limited. While traditional complementary therapies are commonly utilized both globally and nationally, their efficacy remains a subject of debate. This is primarily due to the varying beliefs, knowledge, and facts surrounding these practices, coupled with the limited opportunities for comprehensive research in this area. In this direction, in order to clarify these ambiguities and to contribute to the field, when the findings obtained in our study regarding the knowledge, attitudes and behaviors of the elderly regarding the use of traditional complementary therapies were evaluated in general; it was concluded that traditional complementary therapy practices relieve pain, that they use traditional complementary therapy mostly on recommendation and because medical practices do not improve, that it has fewer side effects, and that they have positive knowledge, attitudes and behaviors towards going to the doctor when there is pain and using the medications prescribed by the doctor. However, the rate of those who think that traditional complementary treatment practices should only be used as a last resort when traditional medicine does not offer any solution, that they should be used in consultation with doctors and health personnel, and that traditional complementary treatment products used can interact with drugs and cause poison effect was realized at lower levels. Therefore, considering the gradual increase in traditional complementary treatment practices, which are included in the current treatment concept, the conscious use of these practices also requires some basic knowledge. Traditional complementary treatment methods that are used unconsciously and without consulting healthcare professionals among elderly patients are worrisome for two reasons. First, when patient-physician communication is poor, the older adults are reluctant to share the traditional complementary treatment methods they use or intend to use with health personnel.

Second, in the absence of clear communication, potential harmful interactions between traditional complementary treatment methods and regular medications may not be recognized and this may negatively affect the health of the elderly. Therefore, healthcare professionals should have sufficient knowledge about traditional complementary treatment methods, follow scientific developments in traditional complementary treatment methods, take into account that elderly patients may have positive attitudes towards the use of traditional complementary treatment methods, provide information that traditional complementary treatment products used simultaneously during the medical treatment process may interact with the medications they use and worsen their health status, inform and guide their patients about traditional complementary treatment practices, and develop correct health literacy behavior regarding the use of traditional complementary treatment methods.

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Ethical Approval

Ethical approval was priorly received from Non-Interventional Clinical Research Ethics Committee (No: GO/2023/78) of Burdur Mehmet Akif Ersoy University.

Author Contributions

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