RESEARCH ARTICLE / Araştırma Makalesi

Assessment of Complementary Medicine Use among Patients with Pain: A Descriptive Study from a Tertiary Hospital

Ağrılı Hastalarda Tamamlayıcı Tıp Kullanımının Değerlendirilmesi: Üçüncü Basamak Bir Hastaneden Tanımlayıcı Bir Çalışma

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Abstract

Aim The main objective in this study was to evaluate the frequency of complementary medicine (CM) use among patients with pain. We also aimed to investigate the attitudes of patients towards CM. **(Sakarya Med J 2018, 8(3):603-610)**

Methods This is a descriptive study. The population of the study consisted of patients who admitted to a Physical Medicine and Rehabilitation Clinic in May 1- June 30, 2018 with pain complaints. Data were collected using a questionnaire consisting of 14 questions which is applied to the participants by a face-to-face interview method.

Results Of the 204 participating patients, 56.9% (n=116) were female, 50.5% (n=103) were in the 40-64 age group and 27.5% (n=26) were graduated from primary school. The frequency of the patients who used at least one CM application was 56.9% (n=116). The most common used CM applications were herbal therapy, hijama (wet cupping) and cupping therapy, respectively. Our results suggested that 65 and over age group, females, those who have an education level of primary school or less and those who have pain accompanied by chronicity or comorbidity tended to utilize CM more frequently.

Conclusion The popularity of complementary medicine continues to grow. Mechanism of action of many CM practices is not yet known. Our study has shown that patients with pain, particularly with pain accompanied by chronicity and comorbidity use CM extensively. Further analytical studies should be carried out to expand our knowledge about CM.

Keywords Pain; complementary medicine; chronic pain

Öz

Amaç Bu çalışmanın temel amacı, ağrılı hastalarda tamamlayıcı tıp (TT) kullanım sıklığını belirlemektir. Ek olarak hastaların TT'ye karşı tutumlarının araştırılması amaçlanmıştır. **(Sakarya Tıp Dergisi 2018, 8(3):603-610).**

Yöntem Bu çalışma tanımlayıcı tipte bir araştırmadır. Çalışmanın evreni, 1 Mayıs-30 Haziran 2018 tarihleri arasında Fiziksel Tıp ve Rehabilitasyon Kliniğine ağrı şikayeti ile başvuran hastalardan oluşmaktadır. Verilerin toplanması yüz yüze görüşme yöntemi ile katılımcılara uygulanan 14 sorudan oluşan bir anketin uygulanmasıyla gerçekleştirilmiştir.

Bulgular Çalışmaya katılan 204 hastanın %56,9'u (n = 116) kadındı. %50,5'i (n = 103) 40-64 yaş grubunda olup, %27,5'i (n = 26) ilkokul mezunuydu. En az bir TT uygulaması deneyimi olan hastaların sıklığı %56,9'du (n = 116). En yaygın kullanılan TT uygulamaları sırasıyla bitkisel tedavi, hacamat ve kupa tedavisi idi. Çalışmamızın bulguları 65 yaş ve üzeri yaş grubunun, kadınların, ilkokul veya daha düşük eğitim düzeyine sahip olanların ve kronisite veya komorbiditenin eşlik ettiği ağrıları olanların daha sık TT kullanma eğiliminde olduğunu göstermiştir.

Sonuç Toplumda TT uygulamalarının popülaritesi giderek artmaktadır. Birçok TT uygulamasının etki mekanizması henüz tam olarak bilinmemektedir. Çalışmamızda ağrılı hastaların, özellikle de kronisite veya komorbiditenin eşlik ettiği ağrıları olanların yaygın olarak TT kullandığı gösterilmiştir. TT hakkında bilgimizi genişletmek için daha fazla analitik çalışma yapılmalıdır.

Anahtar Kelimeler Ağrı; tamamlayıcı tıp; kronik ağrı

Introduction

Pain, originating from a particular region of the body, is an unpleasant emotional sensation and behavior about the past experiences of a person.[1] Despite the significant improvements in pain treatment, pain is not completely ameliorated in all of the patients, which leads patients to seek different approaches such as complementary medicine (CM) for pain relief.[2] CM is a broad field of health that encompasses all of the health services, methods, practices, and the accompanying theories and beliefs outside of a dominant health system in a given society or culture at a given time.[3] CM practices are not generally taught at medical schools. In fact, many of them are not accessible in health care facilities, and are not commonly repayable by social security schemes. However, utilization of CM practices among the public is becoming more popular day by day.[4]

The widespread use of CM has led the governments take steps towards this issue. As an example, The National Center for Complementary and Alternative Medicine (NCCAM) was created in the United States in 1998. Following this, an increasing number of healthcare institutions have started to offer CM in their organizational structure.[5] In Turkey, the first regulation in this field was "The Acupuncture Treatment Regulation" in 1991. Later in 2014, "Regulation on Traditional and Complementary Medical Practices" was published by the Turkish Ministry of Health. This regulation identified the attributes of CM practitioners and the necessary training for practices. Also, health institutions where CM practices would be offered and which CM modalities to be applied according to certain diseases were determined. Furthermore, the authority to practice CM was only given to physicians, dentists and pharmacists.[6]

It is reported that use of CM varies from 30% to 80% in different countries all over the world.[7] Studies in Turkey also suggest that the prevalence of CM practices is at high levels; particularly in patients with chronic conditions, pediatric patients and pain.[8,9]

Therefore, our main purpose was to evaluate the frequency of CM use among patients with pain. We also aimed to investigate the attitudes of patients towards CM.

Materials and Methods

Study design and setting

This is a descriptive study. The study was performed on patients who admitted to a tertiary education and research hospital with pain complaints.

Participants

The population of the study consisted of patients who admitted to a Physical Medicine and Rehabilitation Clinic between May 1 and June 30, 2018 with pain complaints. No sample size was calculated. Patients who were aphasic, who had dementia, aged under 18, unwilling to do study and who had difficulty to understand the questions were excluded from the study

Data collection tools

A questionnaire form was prepared by the researchers based on the literature data.2[3,10] The questionnaire consisting of 14 questions was applied to the participants by a face-to-face interview method. The socio-demographic characteristics of the patients, patients' use of complementary medicine, patients' attitudes towards complementary medicine practices and patients' sources of

information about these practices were questioned by the questionnaire form.

Statistical methods

Descriptive data were presented as number and percentage. Pearson chi-square test was performed to assess the differences between groups for the categorical variables. SPSS for Windows software (version 20) was used for data analysis (SPSS, Chicago, IL, USA). p values lower than 0.05 was considered as statistically significant.

Ethical considerations

Participation in this study was purely voluntary. Patients who participated in this study were informed about the purpose of the study and their consents were obtained prior to data collection. The study was approved by Scientific Researches Ethics Committee of Kahramanmaraş Sütçü İmam University (Decision date: 02.05.2018; Decision number: 09).

Results

There were 2425 admissions to our physical medicine and rehabilitation polyclinic during the study period. Following the application of exclusion criteria a total of 204 patients were enrolled in this study. Of the 204 participating patients, 56.9% (n=116) were female, 37.7% (n=77) were in the 18-39 age group, 50.5% (n=103) were in the 40-64 age group and 11.8% (n=24) were in the 65 and over age group. Of the patients, 6.4% (n=13) were uneducated, 27.5% (n=56) were graduated from primary school, 18.5% (n=38) were graduated from middle school, 25.5% (n=52) were graduated from high school and 22.1% (n=45) were graduated from university (Table 1).

Table 1. Socio-demographic characteristics of patients

Socio-demographic characteristics	Number	%[a]
Age groups (years)		
18-39	77	37.7
40-64	103	50.5
65 and over	24	11.8
Sex		
Female	116	56.9
Male	88	43.1
Educational status		
Uneducated	13	6.4
Primary school	56	27.5
Middle school	38	18.5
High school	52	25.5
University	45	22.1

a: Column percentage

The rate of patients stating that they were interested in CM was 34.8% (n=71). While patients stating not to be against CM were 48.0% (n=98) of the total participants, 17.2% (n=35) were against CM use. Of the patients, 34.3% (n=70) (17 lumbar disc herniation, 12 osteoarthritis, 11 cervical disc herniation, 6 fibromyalgia syndrome, 5 diabetes mellitus, 5 migraine, 3 rheumatoid arthritis, 2 edema, 2 goiter, 1 Behçet's disease, 1 bone fracture, 1 restless leg syndrome, 1 tendon tear, 1 meniscus tear, 1 stroke, 1 multiple sclerosis) reported to have a chronic condition related to pain.

The frequency of the patients who used at least one CM application was 56.9% (n=116). The CM applications used by patients were herbal therapy (31.4%), hijama (wet cupping) (27.9%), cupping therapy (19.1%), acupuncture (14.2%), leech therapy (12.7%) and other CM modalities (3.4%). Distribution of CM applications used by the patients was presented in Figure 1.

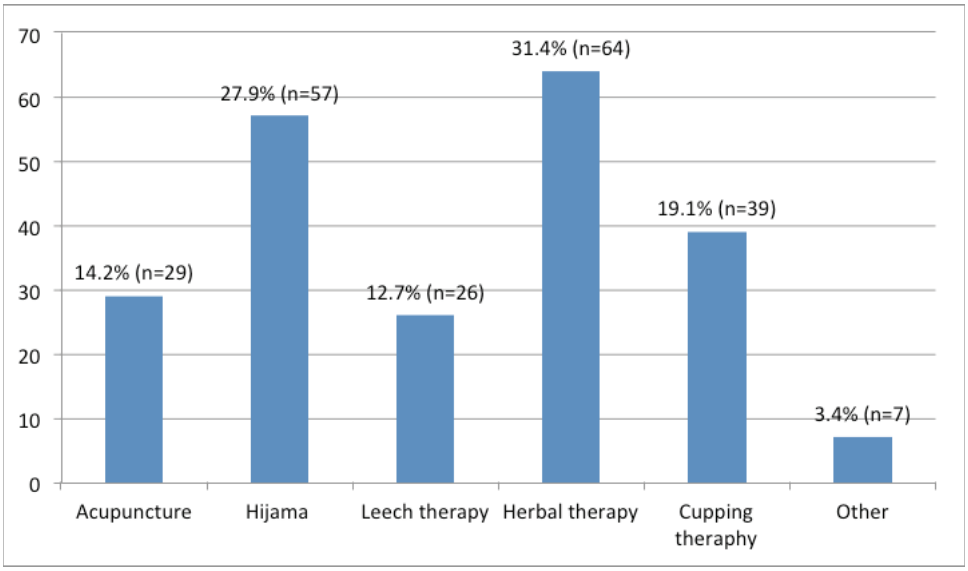

Figure 1. Distribution of CM applications used by the patients, CM: Complementary Medicine

Of the 116 patients who used at least one CM application, 50.9% (n=59) had a health personnel to perform the application, 91.4% (n=106) completely or partially benefited from CM and 56.9% (n=66) used CM just to try (Table 2). The percentage of patients completely benefiting from CM was significantly higher in patients those who had a health personnel to perform the CM application (2=6.577, p=0.037).

Table 2. Patients' CM use features

Characteristics of patients' CM use	Number	%[a]
Did a health personnel perform the application?		
Yes	59	50.9
No	57	49.1
Have you benefitted from the application?		
Yes, completely	47	40.5
Partially	59	50.9
No	10	8.6
What is your reason of using CM?[b]		
A health personnel suggested CM	41	35.3
Conventional medical approaches was inadequate	41	35.3
I used CM to avoid drug adverse effects	30	25.9
I used CM to try	66	56.9
I used CM since it was cheaper	1	0.9

a: Column percentage of CM users (N=116)
b: Multiple answers, total does not add to 100%, CM: Complementary Medicine

We examined CM use according to patients' certain features. CM use was significantly different according to age groups (2=14.386, p=0.001), sex (2=9.929, p=0.002), educational status (2=10.509, p=0.033), patients' opinions on CM (2=47.643, p<0.0001), presence of a chronic condition related to pain (2=5.956, p=0.015), pain duration (2=20.864, p<0.0001) and pain location (2=11.782, p=0.038). Higher rates of CM use were found in 65 and over age group, females, uneducated and primary school graduates, those who are interested in CM, those who have a chronic condition related with pain, those who have pain for more than 12 weeks and those who have pain in multiple body locations (Table 3). We investigated the attitudes of patients towards CM. Of the participants, 74.5% (n=152) thought that CM applications should be more widespread in health facilities and 49.0% (n=100) thought that CM applications should be applied for less severe and easily treatable diseases.

Table 3. CM use of patients according to their certain features

	CM use		p[b]
	Yes	No	
Features of patients	**Number (%[a])**	**Number (%[a])**	
Age groups (years)			
18-39	37 (48.1)	40 (51.9)	0.001
40-64	57 (55.3)	46 (44.7)	
65 and over	22 (91.7)	2 (8.3)	
Sex			
Female	77 (66.4)	39 (33.6)	0.002
Male	39 (44.3)	49 (55.7)	
Educational status			
Uneducated	10 (76.9)	3 (23.1)	0.033
Primary school	40 (71.4)	16 (28.6)	
Middle school	19 (50.0)	19 (50.0)	
High school	25 (48.1)	27 (51.9)	
University	22 (48.9)	23 (51.1)	
Opinions on CM			
Interested in CM	53 (74.6)	18 (25.4)	<0.0001
Not against CM	61 (62.2)	37 (37.8)	
Against CM	2 (5.7)	33 (94.3)	
Chronic condition related to pain			
Yes	48 (68.6)	22 (31.4)	0.015
No	68 (50.7)	66 (49.3)	
Pain duration			
Less than 6 weeks	11 (35.5)	20 (64.5)	<0.0001
6-12 weeks	8 (28.6)	20 (71.4)	
More than 12 weeks	97 (66.9)	48 (33.1)	
Pain location			
Head	4 (36.4)	7 (63.6)	0.038
Neck	15 (42.9)	20 (57.1)	
Back or waist	33 (61.1)	21 (38.9)	
Leg, knee or foot	22 (56.4)	17 (43.6)	
Shoulder, arm or hand	13 (48.1)	14 (51.9)	
Multiple locations	29 (76.3)	9 (23.7)	

a: Row percentage, b: Chi-square, CM: Complementary Medicine

Discussion

The popularity of CM has grown steadily over time and CM practices are increasingly being utilized. This study suggested that the majority of the patients showed positive attitudes towards CM practices and CM was commonly used in those with pain complaints. Approximately three fourths of the participants thought that CM applications should be more widespread in health facilities and less than half of the patients thought that CM applications should be applied for only less severe and easily treatable diseases. Only 17.2% of the participants stated that they were against CM use. Bülbül et al. reported that 63.6% of the participants in their study thought CM should be used for mild and easily treatable diseases.[11] Similarly, in a study carried out by Güngörmüş et al. 68.2% of the participants thought that CM should be used in less severe diseases.[3] Nevertheless, a considerable portion of the Turkish population have a positive attitude towards CM and ignoring these practices would not provide any benefit to both patients and health staff.

The frequency of the patients using CM application at least once was 56.9%. The prevalence of CM use in Turkey was found in different rates ranging between 12.6% and 98.7% according to the targeted study population.[10,12] Our findings are in accordance with the results of a study which is also composed of patients experiencing pain.3 We found that those who have a chronic condition related to pain or those who have pain for more than 12 weeks used CM even more frequently. There is evidence in the literature supporting the association with high levels of CM use and pain accompanied by chronicity or comorbidity.[13-15] Pain is difficult to resolve completely. Patients with chronic pain and comorbidities may benefit less often from conventional treatments, which may have led them to use CM.

Herbal therapy and hijama were found to be the most common used CM applications in this study. It is well established in the literature that herbal therapy is an extensively utilized modality among individuals seeking CM.[16-18] A recent nationwide study conducted in Turkey revealed that herbal therapy was the most common CM practice among Turkish people. The study also reported that the use of hijama was one of the most common CM modalities, which is consistent to our findings.[19] Herbal treatments are easy to reach CM modalities. This may have contributed to their higher utilization rate. The fact that hijama is being applied at a high rate may be due to the religious belief in our country.

In this study, 91.4% of the patients stated that they had completely or partially benefited from CM. Although not much is known about the mechanism of action of how the CM applications reduce pain in patients, there is evidence that patients relieved of pain with CM use and CM is a common practice among patients suffering pain.[20, 21]

We found that 50.9% of the patients had health personnel to perform the CM application. In addition, the percentage of patients who completely benefited from CM was significantly higher in patients those who had a health personnel to perform the CM application. We believe this is a noteworthy finding. Most CM practices in Turkey are carried out by individuals who are not health professionals. Almost all of these practitioners are unlicensed and do not receive a formal education on the CM modality they perform on patients.[19] We believe that the reason why a considerable proportion of patients have health personnel to perform CM in our study is the regulation of Turkish Ministry of Health in 2014, which governs the principles of CM use. The regulation has given

the authority to practice CM only to certificated health personnel, which may also prevent risky CM practices performed outside of a health institution.

Main reason of CM use in our study was patients' wish to try CM. In addition, one third of patients used CM since they thought conventional medicine was inadequate and one fourth of patients used CM to avoid adverse drug effects. In the literature, similar to our findings, reported reasons for using CM included patients' desire to try new treatments, fear of adverse drug effects, dissatisfaction with conventional treatment.[3, 22]

Our results suggested that 65 and over age group, females and those who have an education level of primary school or less tended to utilize CM more frequently. The subject how socio-demographic characteristics are related to CM use in Turkey is controversial. A study reported that the use of CM was more frequent among males and high school graduates.[3] Some others reported that females used CM more frequently than males.[23, 24] There are also studies finding no relationship between education and CM use.[19, 25] However a systematic review revealed that women, middle age group and higher educational levels were associated with CM in developed countries.[25] The difference between the results of the studies may be due to the different characteristics of the populations in different studies. For instance, CM utilization in developed countries is fundamentally as a result of people's wish for holistic well-being.[26] On the other hand, typical CM users in developing countries have heterogeneous characteristics.[27, 28]

This study has several limitations. One limitation is the study design. Since it is planned as a descriptive study, analytic aspect of the study is poor. Since the sample is not large, the results may not be extrapolated to general population. Another limitation is that some socio-demographic characteristics which may affect CM use such as marital status and income were not inquired in the questionnaire. Also, where CM was applied and previous CM use history were not asked.

In conclusion, the popularity of CM which has a wide scope continues to grow. Mechanism of action of many CM practices is not yet known. Our study has shown that patients with pain, particularly with pain accompanied by chronicity and comorbidity extensively use CM and main reason of CM use in our study was patients' desire to try CM applications. More than half of the patients had a health personnel to perform the CM application. This is a plausible finding since complementary treatment may be associated with side effects. Thus, CM would be used as an adjunct to conventional medicine and expansion of CM in health institutions may contribute to prevent unlicensed individuals from performing CM practices. Further analytical studies should be carried out to expand our knowledge about CM.

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