

**Athens Institute for Education and Research
ATINER**



**ATINER's Conference Paper Series
NUR2017-2446**

**Determining the Use of Herbal Medicine among
Hospitalized Patients of the Physical Therapy and
Rehabilitation Unit**

**Zeliha Koç
Associate Professor
Health Sciences Faculty
Ondokuz Mayıs University
Turkey**

**Asuman Şener
Lecturer
Health Services Vocational College
Ondokuz Mayıs University
Turkey**

**Zeynep Sağlam
Lecturer
Health Sciences Faculty
Ondokuz Mayıs University
Turkey**

An Introduction to
ATINER's Conference Paper Series

Conference papers are research/policy papers written and presented by academics at one of ATINER's academic events. ATINER's association started to publish this conference paper series in 2012. All published conference papers go through an initial peer review aiming at disseminating and improving the ideas expressed in each work. Authors welcome comments

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:

Koç, Z., Şener, A. and Sağlam, Z., (2018). "Determining the Use of Herbal Medicine among Hospitalized Patients of the Physical Therapy and Rehabilitation Unit", Athens: ATINER'S Conference Paper Series, No: NUR2017-2446.

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209 Email: info@atiner.gr URL:
www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm
Printed in Athens, Greece by the Athens Institute for Education and Research. All rights reserved. Reproduction is allowed for non-commercial purposes if the source is fully acknowledged.
ISSN: 2241-2891
23/05/2018

Determining the Use of Herbal Medicine among Hospitalized Patients of the Physical Therapy and Rehabilitation Unit

Zeliha Koç

Asuman Şener

Zeynep Sağlam

Abstract

This descriptive study aimed to determine the use of herbal medicine by patients of a physical therapy and rehabilitation unit. The research was realized with the participation of 207 patients between 2 March and 1 September 2014. Data were collected via a questionnaire form with 37 questions on socio-demographic and clinical features of patients and their use of herbal medicine methods. Consent of the institution and informed consent of patients were taken before the study. Data were analyzed by Percentage, Chi-square, and Fisher's exact tests. Of the patients participating in the study, 76.8% were female, 23.2% were men, 98.1% were married, 34.3% were primary school graduate, 86.5% had balanced income-expenditure ratio, 99% had social insurances, and 50.7% lived in a town. It was determined that 96.1% of the patients were satisfied with the current medical treatment; 33.3% were suggested complementary and alternative treatment methods by their social network apart from medical treatment; 28.5% thought both medical treatments and complementary and alternative treatment methods were effective; 8.2% shared information about their use of complementary and alternative treatment methods with their physicians; 4.3% found herbal drugs as safe; 91.3% thought there might be possible side effects of herbal drugs when interacted with other drugs; and only 1.4% believed that herbal drugs were more effective than other drugs and utilized some herbs, such as linden (52.2%), lemon (48.3%), garlic (17.9%), mint (16.4%), daisy (10.1%), ginger (9.7%), cinnamon (4.3%), thyme (4.3%), and green tea (4.3%). It was found that the use of herbal medicine by patients differed in terms of marital status, social insurance, family structure, level of satisfaction with the current medical treatment, consideration of herbal drugs as safe or not, and state of considering herbal drugs as safer than other drugs. In this study, although the majority of patients did not find herbal drugs safe and thought of probable side effects in case of interaction with other drugs, approximately half of them (48%) utilized herbal drugs during medical treatment. In the light of study findings, we suggest that use of herbal medicine by patients should be determined and patients should be informed about the advantages and disadvantages of these treatments in an unprejudiced way.

Keywords: Herbal Medicine, Physical Therapy, Patient, Side Effect

Acknowledgements: We would like to thank the patients who contributed to the research.

Introduction

There is limited evidence on the effectiveness of most Complementary and Alternative Medicine (CAM) methods; however, the rate of benefiting from these methods has gradually increased throughout the world and in Turkey. The prevalence of CAM use differs across countries, but it has been reported that the prevalence of CAM use is 42.1% in the United States, 49.3% in France, 70.4% in Canada, 48.2% in Australia, 71% in Chile, 70% in China, 40% in Columbia, and 80% in African countries (Özçelik & Fadiloğlu 2009).

The National Center for Complementary and Alternative Medicine (NCCAM) classifies CAM methods as follows: mind-body medicines (meditation, yoga, imagery, deep-breathing exercises, progressive relaxation, prayer, biofeedback, hypnosis, tai chi, qi gong, etc.); biologic-based practices (herbal medicine or teas, dietary supplements such as fish oil, probiotics, special diets, etc.); manipulative and body-based practices (osteopathic and chiropractic manipulation, massage therapy, alexander technique, feldenkrais, trager psychophysical integration etc.); energy therapies (qigong, reiki, therapeutic touch, etc.); and whole medical systems (traditional Chinese medicine, acupuncture, homeopathy, Ayurveda, naturopathy, etc.) (NCCAM 2012).

Today, the majority of patients prefer using herbal products in addition to medical treatment without referring to a health care professional, while most of the general population thinks that CAM methods do not have any side effects (Deng et al. 2007) and prefer to benefit from these methods in order to treat diseases or promote health (James et al. 2016). The majority of studies on this topic showed that the most important sources of information related to CAM use among patients were the media, friends, and family; moreover, patients do not typically inform health care professionals about CAM use (Algier et al. 2005, Taş et al. 2005, İnanç et al. 2006). It is of crucial importance for health care professionals to question patients about the use of herbal treatments (Sarışen & Çalışkan 2005). In this context, health care professionals should evaluate CAM use among patients by considering potential risks of CAM and should inform patients accordingly (Karagöz 2006).

In order to provide high quality and safe care and to protect patients from harm, it is very important to identify CAM use in patients since some CAM methods, herbal treatments in particular, may interact with conventional treatments, and thereby deteriorate or jeopardize the patient's general condition (Jatau et al. 2016).

In the literature regarding CAM use among patients, the number of studies that examine use of CAM methods in patients hospitalized at the physical therapy and rehabilitation clinic is very limited. However, research and findings about differences in CAM use across countries, regions, and cultures are needed. To our knowledge, the current study is the first one to determine the use of herbal treatment methods in patients hospitalized at a physical therapy and rehabilitation unit located in Northern Turkey. Findings of the current study may prove to be beneficial in developing appropriate strategies for national and regional action plans regarding CAM use.

Aim of the Study

This descriptive study aimed to determine the use of herbal treatment methods in patients hospitalized at a physical therapy and rehabilitation unit. Answers to the following research questions were sought:

- What are the socio-demographic and clinical characteristics of patients who use herbal treatment methods?
- What is the level of herbal treatment use in patients?
- What are patients' opinions and usage characteristics regarding CAM?

Material and Method

Study Setting and Period

The present study is descriptive and was conducted between March 2 and October 21 of 2014 in order to determine the use of herbal treatments in patients hospitalized at a physical therapy and rehabilitation unit.

Study Population and Sample

It aimed to reach the whole population (n=256) rather than drawing a sample. However, during data collection, patients who did not agree to participate in the study were excluded (n=49) and the study was finalized with 207 patients who completed the questionnaire form and volunteered to participate (80.8%).

Instruments

Data was collected using a questionnaire form. The questionnaire form included a total of 37 questions about sociodemographic characteristics (age, education level, gender, marital status, number of children, socioeconomic status, family type, social security, longest site of residence) and CAM use related variables (medical diagnosis, satisfaction with medical treatment, use of any treatment method other than medical treatment, CAM methods other than medical treatment being recommended to patients, who recommended these methods if such a recommendation was made, status of using any CAM method other than medical treatment, duration of using CAM methods other than medical treatment, when was CAM last used, reason(s) for using treatment methods other than medical treatment, simultaneous use of medical treatment with CAM methods, sharing information about CAM use with the doctor or other health team members, knowledge on side effects of CAM methods, opinions on benefits of CAM methods, purpose of herbal medicine use, finding herbal medicines safe, informing the doctor about herbal medicine use, interaction between herbal medicine used by the patient and medical treatment, believing that herbal medicine is more effective than other medical treatments, etc.).

Data Collection

The questionnaire form was pilot tested with 10 patients and incomprehensible or incomplete questions were revised. After the pilot study, the questionnaire draft took its final shape. In the present study, ethical principles outlined in the Helsinki Declaration were complied with. Data was collected by the researcher via face-to-face interviews. Informed consent was obtained from the patients. After explaining the study to the patients, the questionnaire form was administered. The patients were told that it was totally their decision whether they wanted to participate in the study or not, that their names would not be written on the questionnaire forms, and that data collected in the study would be used for research purposes only. It took approximately 15-20 minutes to complete the questionnaire.

Data Analysis/Statistical Analysis

Data was analyzed using the SPSS 15.0 software. Percentages were calculated and the Fisher chi-square test was used. Findings were presented in frequencies, percentages, median, mean, and standard deviation. Level of statistical significance was accepted as $p < 0.05$.

Results

The distribution of socio-demographic characteristics is presented in Table 1. Among the patients, 76.8% (n=159) were female, 23.2% (n=48) were male, 98.1% (n=203) were married, 84.1% (n=174) had a nuclear family, 50.7% (n=105) mostly resided at the country, 86.5% (n=179) had an income equal to expenditures, and 99.0% (n=205) had social security (Table 1). The mean age was 58.6 ± 14.4 . It was determined that there were no significant differences between patients who used CAM and those who did not in terms of socio-demographic characteristics (age, education level, marital status, number of children, socioeconomic status, family type, social security, longest site of residence) (Table 1).

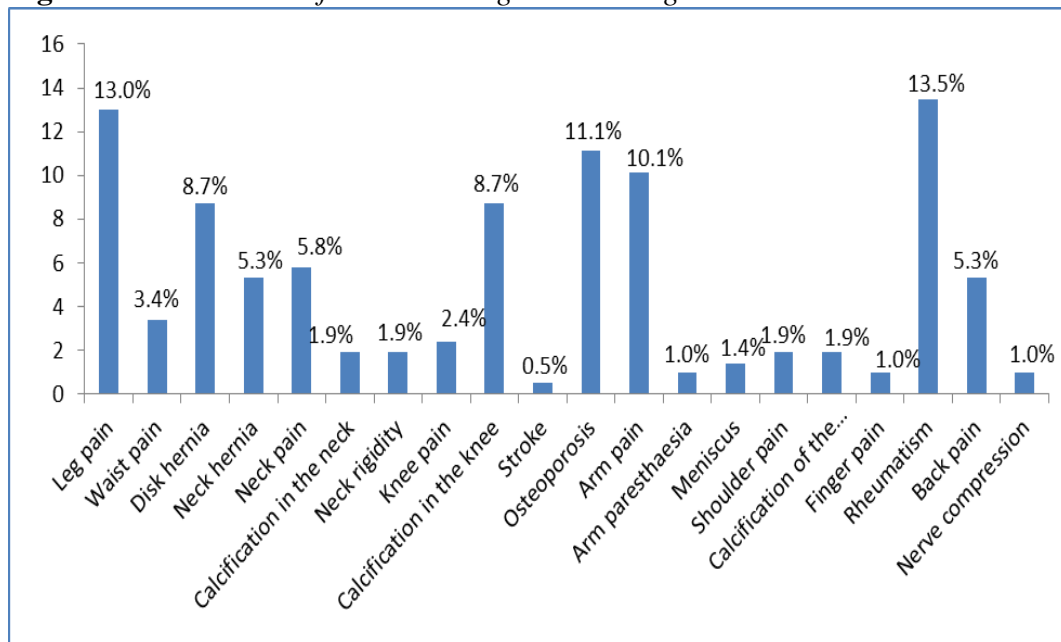
Table 1. *Distribution of Socio-demographic Characteristics according to CAM Use*

	CAM Users (n=23)		CAM Non-users (n=184)		Total (n=207)		Test Statistic
	n	%	n	%	n	%	
Age							χ^2 : 3.325 p: 0.505
24-36 years	-	-	12	6.5	12	5.8	
37-49 years	4	17.4	46	25.0	50	24.2	
50-62 years	10	43.5	57	31.0	67	32.4	
63-75 years	5	21.7	45	24.5	50	24.2	
76+ years	4	17.4	24	13.0	28	13.5	
Mean age	62.2±13.5		58.2±14.5		58.6±14.4		
Gender							χ^2 : .763 p: 0.382
Female	16	69.6	143	77.7	159	76.8	
Male	7	30.4	41	22.3	48	23.2	

Education Level							χ^2 : 4.624 p: 0.464
Literate	11	47.8	64	34.7	75	36.2	
Elementary school	6	26.1	65	35.3	71	34.3	
Middle school	3	13.0	24	13.0	27	13.0	
High school	3	13.0	23	12.5	26	12.6	
University	-	-	8	4.3	8	3.9	
Marital status							χ^2 : Fisher kikare p: 1.000
Married	23	100.0	180	97.8	203	98.1	
Single	-	-	4	2.2	4	1.9	
Socioeconomic status							χ^2 : 1.535 p: 0.464
Income lower than expenditures	1	4.3	22	12.0	23	11.1	
Income equal to expenditures	21	91.3	158	85.9	179	86.5	
Income higher than expenditures	1	4.3	4	2.2	5	2.4	
Family type							χ^2 : Fisher kikare p: 0.768
Extended family	4	17.4	29	15.8	33	15.9	
Nuclear family	19	82.6	155	84.2	174	84.1	
Number of children							χ^2 : 5.108 p: 0.164
1-3 children	8	34.8	87	47.3	95	45.9	
4-6 children	10	43.5	78	42.4	88	42.5	
7+ children	5	21.7	15	8.2	20	9.7	
No children	-	-	4	2.2	4	1.9	
Mean number of children	4.5±1.8		3.7±1.8		3.8±1.8		
Social security							χ^2 : Fisher kikare p: 1.000
Present	23	100.0	182	98.9	205	99.0	
Not present	-	-	2	1.1	2	1.0	
Longest site of residence							χ^2 : 1.069 p: 0.586
City	3	13.0	30	16.3	33	15.9	
Country	14	60.9	91	49.5	105	50.7	
Village	6	26.1	63	34.2	69	33.3	

It was determined that 13.5% (n=28) of the patients were admitted to the hospital due to rheumatism, 13.0% (n=27) due to leg pain, 11.1% (n=23) due to bone thinning (osteoporosis), 10.1% (n=21) due to arm pain, 8.7% (n=18) due to calcification of the knee, 5.8% (n=12) due to neck pain, 5.3% (n=11) due to neck hernia, 5.3% (n=11) due to back pain, 3.4% (n=7) due to waist pain, 2.4% (n=5) due to knee pain, 1.9% (n=4) due to calcification in the knee, 1.9% (n=4) due to neck rigidity, 1.9% (n=4) due to shoulder pain, and 1.9% (n=4) due to calcification of the bones (Figure 1).

Figure 1. Distribution of Medical Diagnoses among Patients



Characteristics related to CAM use were presented in Table 2. It was determined that 17.4% (n=4) of the patients benefited most from herbal medicine; 77.8% (n=21) reported that the most important sources of information about CAM use were newspapers and magazines; 91.3% (n=21) thought that CAM methods may be beneficial; 49.8% (n=103) felt better when using CAM; 21.7% (n=3) used CAM methods 3 months ago; and 91.7% (n=11) reported that they would use CAM methods in accordance with doctor’s recommendations (Table 2).

Table 2. Distribution of CAM Use Related Characteristics (n=207)

Characteristic	N	%	
Which CAM methods were used most (n=23)	Herbal medicine	4	17.4
	Herbal cream	3	13.0
	Cupping	2	8.7
	Sea salt	1	4.3
	Exercise	2	8.7
	Thermal spring	1	4.3
	Wrapping sheep’s wool	1	4.3
	Massage	2	8.7
	Magnetic band	1	4.3
	Hot compress	3	13.0
	Cold compress	3	4.3
	* Who recommended CAM methods	Relatives	25
Neighbors		21	30.4
Health personnel		2	2.9
Other patients’ families		13	18.8
Radio and television		45	65.2
Media		6	8.7
Internet		4	5.8

* Purpose of CAM use (n=23)	Medical treatment not resulting in desired outcomes	1	4.3
	Others have tried them and were satisfied with them	10	43.5
	Out of curiosity	1	4.3
	Thinking they would be beneficial	21	91.3
	To try every available treatment	1	4.3
	To boost the immune system	-	-
	To slow disease progress	4	17.4
	To find psychosocial relief	-	-
When did you last used CAM methods (n=23)	1 week ago	3	13.0
	2 weeks ago	3	13.0
	1 month ago	3	13.0
	3 months ago	5	21.7
	6 months ago	3	8.7
	1 year ago	3	8.7
	2 years ago	3	17.4
	Opinions about benefits of CAM methods	Make you feel better	103
Slow disease progression		49	23.7
Treat the disease		2	1.0
Reduce pain		47	22.7
Has no benefit		35	16.9
CAM use recommended by whom (n=12)	Doctor	11	91.7
	Nurse	7	58.3
	Family members	5	41.7
	A friend I trust	4	33.3
	Search on the Internet	-	-
* Sources of information about CAM methods (n=27)	Newspapers and magazines	21	77.8
	Medical books and articles	3	11.1
	Other health personnel	8	29.6
	Other people at the clinic	-	-

* More than one answer was given.

Opinions of patients about CAM were shown in Table 3. It was determined that 96.1% (n=199) of the patients were satisfied with medical treatment; 33.3% (n=69) reported that CAM methods other than medical treatment were recommended from people in their social circle; 28.5% (n=59) thought that both medical treatment and CAM methods were effective; 8.2% (n=17) shared information about CAM use with doctors; and only 4.3% (n=9) found herbal medicine safe, while 91.3% (n=189) thought that herbal medicine may interact with other drugs and cause side effects. Furthermore, only 1.4% (n=3) believed that herbal medicine is more effective than other drugs.

Table 3. *Opinions of Patients about CAM Methods (n=207)*

Characteristic		CAM Users		CAM Non-users		Total	
		n	%	n	%	n	%
Being satisfied with medical treatment	Yes	22	95.7	177	96.2	199	96.1
	No	1	4.3	7	3.8	8	3.9
Use of any treatment other than medical treatment	Yes	2	8.7	3	1.6	5	2.4
	No	21	91.3	181	98.4	202	97.6
Being recommended to use Cam methods other than medical treatment	Yes	21	91.3	48	26.1	69	33.3
	No	2	8.7	136	73.9	138	66.7
Simultaneous use of CAM methods with medical treatment	Yes	6	26.1	-	-	6	2.9
	No	17	73.9	184	100.0	201	97.1
Opinions about side effects of CAM methods	Yes	12	52.2	-	-	12	5.8
	No	11	47.8	184	100.0	195	94.2
Opinions about which treatment method is more effective	Medical treatment	12	52.2	135	73.4	147	71.0
	CAM methods	-	-	1	0.5	1	0.5
	Both	11	47.8	48	26.1	59	28.5
Knowledge on methods other than medical treatment	Yes	12	52.2	15	8.2	27	13.0
	No	11	47.8	169	91.8	180	87.0
Finding herbal medicine safe	Yes	1	4.3	8	4.3	9	4.3
	No	22	95.7	176	95.7	198	95.7
Opinions about the side effects of herbal medicine	Yes	22	95.7	167	90.8	189	91.3
	No	1	4.3	17	9.2	18	8.7
Finding herbal medicine more effective than medical treatment	Yes	-	-	3	1.6	3	1.4
	No	23	100.0	181	98.4	204	98.6
Sharing information about CAM use with health team members	Yes	17	73.9	-	-	17	8.2
	No	6	26.1	184	100.0	190	91.8
Wanting to gain information about CAM methods	Yes	23	100.0	166	90.2	189	91.3
	No	-	-	18	9.8	18	8.7
Applying every CAM method recommended by others	Yes	9	39.1	3	1.6	12	5.8
	No	14	60.9	181	98.4	195	94.2

The purposes of herbal medicines by those who indicated their use are presented in Table 4. It was determined that 46.4% (n=20) of the patients used garlic for hypertension; 37.5% (n=3) used onion for cough and edema; 80% (n=8) used rosehip for cold; 66.7% (n=2) used black mulberry for anemia; 63.6% (n=65) used lemon for hypertension; 66.7% (n=6) used thyme for cold; 100% (n=1) used linseed for cholesterol; 30% (n=9) used ginger for stomach ache and cough; 60% (n=3) used hibiscus for ulcer; 100% (n=1) used lamb's ear for edema; 100% (n=2) used lavandula stoeschas for expectorating; 40% (n=2) used rosemary for bronchitis and rheumatism; 77.8% (n=7) used sage for relaxation; 50% (n=1) used hawthorn for hypertension and tachycardia; 53.8% (n=14) used chamomile for fatigue; 33.3% (n=5) used cinnamon for cold and lowering blood sugar; 50% (n=2) used black sesame for hair loss; 100% (n=4) used parsley for kidney detox; 96.4% (n=107)

used linden for cold; 38.5% (n=15) used mint for nausea; 100% (n=13) used green tea for general health; and finally, 100% (n=2) used cassia for constipation.

Table 4. *Distribution of Purposes of Herb Use*

* Herbs and their purpose of use	n	%
Garlic		
Hypertension	20	46.6
Fungal infection	1	2.3
Settle one' stomach	2	4.7
For health	18	41.9
Cold	2	4.7
Onion		
Passing out	1	12.5
Cough	3	37.5
Cold	1	12.5
For swelling	3	37.5
Rosehip		
Kidney pain	2	20.0
Cold	8	80.0
Black mulberry		
Anemia	2	66.7
Fatigue	1	33.3
Lemon		
Vertigo	10	9.8
Headache	11	10.8
Hypertension	65	63.6
Nausea	2	2.0
Settle one's stomach	1	1.0
Caugh	1	1.0
Cold	12	11.8
Thyme		
Settling stomach	3	33.3
Cold	6	66.7
Linseed		
Cholesterol	1	100.0
Ginger		
Headache	1	3.3
Dyspepsia	3	10.0
Stomach ache	9	30.0
Nausea	5	16.7
Settle stomach	2	6.7
Cough	9	30.0
Cold	1	3.3
Hibiscus		
Waist pain	2	40.0
Ulcer	3	60.0
Lamb's ear		
For swelling	1	100.0

Lavandula stoeschas		
Expectorating	2	100.0
Sting nettle		
Waist pain	1	9.1
Knee pain	2	18.2
Rheumatism	3	27.2
For health	4	36.4
For swelling	1	9.1
Rosemary		
Bronchitis	2	40.0
Knee pain	1	20.0
Rheumatism	2	40.0
Sage		
Over sweating	2	22.2
Relaxation	7	77.8
Hawthorn		
Hypertension	1	50.0
Tachycardia	1	50.0
Camomile		
Headache	5	19.3
Stomach ache	1	3.8
Settle stomach	2	7.7
Cough	1	3.8
Cold	3	11.6
Fatigue	14	53.8
Cinnamon		
Tooth ache	2	13.3
Lowering blood sugar	4	26.7
Cholesterol	3	20.0
Lowering sugar	1	6.7
Cold	5	33.3
Black sesame		
Rheumatism	1	25.0
Hair loss	2	50.0
Increase breast milk	1	25.0
Parsley		
Kidney detox	4	100.0
Linden		
Bronchitis	2	1.8
Stomach ache	1	0.9
Cough	1	0.9
Cold	107	96.4
Mint		
Nasal Congestion	4	10.3
Dyspepsia	2	5.1
Stomach ache	2	5.1
Nausea	15	38.5
Better respiration	4	10.3
Cold	12	30.7

Green tea		
For health	13	100.0
Cassia		
Constipation	2	100.0

* More than one answer was given.

The times of herb use are presented in Table 5. It was determined that 52.2% (n=108) of the patients always used linden.

Table 5. Distribution of Times of Herb Use

Herbs name	I use it now		I used it before		I always use	
	n	%	n	%	n	%
Garlic			6	2.9	37	17.9
Onion			3	1.4	5	2.4
Blackberry			-		-	
Rosehip			4	1.9	6	2.9
Black mulberry			1	0.5	2	1.0
Lemon			3	1.4	100	48.3
Thyme					9	4.3
Linseed					1	0.5
Ginger	1	0.5	9	4.3	20	9.7
Hibiscus			5	2.4		
Lamb's ear			1	0.5		
Lavandula stoeshas			2	1.0		
Sting nettle	1	0.5	7	3.4	3	1.4
Rosemary			5	2.4		
Sage			3	1.4	6	2.9
Hawthorn			2	1.0		
Camomile			5	2.4	21	10.1
Cinnamon			6	2.9	9	4.3
Black sesame			4	1.9		
Parsley			2	1.0	2	1.0
Linden			3	1.4	108	52.2
Mint			4	1.9	34	16.4
Cassia			2	1.0	1	0.5
Green tea	1	0.5	3	1.4	9	4.3

* More than one answer was given.

Discussion

In the current study, which aimed to determine the use of herbal treatment methods in patients hospitalized at a physical therapy and rehabilitation unit, it was found that there were no significant differences between patients who used CAM and those who did not in terms of socio-demographic characteristics, such as age, education level, marital status, number of children, socioeconomic status, family type, social security, and longest site of residence. Consistent with our results, in a study by Avci et al. (2009) that investigated CAM use in cancer patients, it was

determined that CAM use did not show differences according to socio-demographic characteristics, such as age, family type, number of children, social security, and longest site of residence. However, contrary to our results, the same study showed that CAM use showed differences according to education level, marital status, and socioeconomic status (Avci et al. 2009).

It was determined that patients mostly used herbal medicine (17.4%) among various CAM methods. In parallel with our results, Yavuz et al. (2007) reported that breast cancer patients mostly used herbal methods (15%).

In the current study, it was found that the patients used CAM methods according to recommendations that they heard on radio and television shows about health. Previous studies also reported that patients were recommended CAM methods mostly by their neighbors (Güven et al. 2013) and family/relatives (Dedeli & Karadakovan 2011). In addition, it was determined that patients gained knowledge about CAM through newspapers and magazine (77.8%), health care professionals (29.6%), and medical books and articles (11.1%), respectively. Consistent with our results, Yavuz et al. (2007) indicated that the most important source of information about CAM use was the media. However, Sağkal et al. (2013) reported that the most important sources of information about CAM use were family, relatives, and friends. Findings change across studies and this may be related to socio-demographic and cultural characteristics of various samples. In addition, patients may have said that their sources of information about CAM methods were newspapers and magazines because these methods are presented more commonly in the media.

The purposes of CAM use among patients differ across studies, but in the current study it was determined that patients used CAM methods mostly because they thought they would be beneficial. Consistent with our results, Dedeli and Karakovan (2011) found that people used CAM methods to be healthy. Previous studies showed that people used CAM methods for being healthy (Özçelik & Fadiloğlu 2009), for living longer and more healthily, for reducing drug side effects, for boosting the immune system, for reducing helplessness, for promoting health behaviors, and for reducing tension and loss of control (Tokem 2006, Özçelik & Fadiloğlu 2009).

According to our results, it was found that among CAM users, 26.1% did not share information about their CAM use with their doctors. In parallel with our findings, other studies on the topic indicated that patients did not share information about CAM use with health care professionals (Colbath & Prawlucki 2001, Gözüm et al. 2003, İnanç et al. 2006, Akyürek et al. 2005, Yavuz et al. 2007, Gözüm et al. 2007, Mazicioğlu et al. 2006). People may not share information about CAM use with health care professionals because they want to refrain from receiving negative reactions; they seem to think that health care professionals are indecisive about and disapprove of these methods. In this context, it is very important to encourage patients to share information about CAM use with their doctors and other health team members without judgment.

In the present study, it was determined that patients mostly benefited from herbal medicine among CAM methods. Previous studies reported that the most common CAM methods were multivitamins, meditation, hypnotherapy, homeopathy, relaxation exercises, and aromatherapy (Kav et al. 2008, Akyürek et al. 2005,

Erbaycu et al. 2010). In a study conducted in Eastern Turkey, it was found that 70% of the participants used at least one CAM method and that they mostly benefited from herbal treatments (Araz et al. 2007). In Dedeli and Karakovan's study (2011), 62.1% of the patients used herbal products and mixtures, while in Uğurluer et al.'s study (2007), 90.6% of the participants used herbal mixtures and herbal teas (89.6% used sting nettle). In Sağkal et al.'s study (2013), 74.4% of the patients used herbal products.

In the present study, it was found that the most common herbal products were linden, lemon, garlic, mint, chamomile, cinnamon, thyme, and green tea. In Dedeli and Karakovan's study (2011), the most common herbal products were found to be linden, sage, and mint-lemon. In Özdemir et al.'s study (2005), the most common herbal products were mint-lemon, thyme water, rosehip, cassia, parsley, and garlic; while in Uğurluer et al.'s study (2007), the most common herb used was sting nettle (Dedeli & Karakovan 2011, Özdemir et al. 2005, Uğurluer et al. 2007). As we see here, the specific herbs used by patients differ across studies, which may be explained by sociodemographic and clinical characteristics, as well as personal preferences.

Conclusion

In the current study, the majority of patients did not find herbal medicine to be safe and instead thought that they would interact with other drugs and thereby cause side effects. However, approximately half of the patients (48%) used herbal medicine in addition to medical treatment. According to our findings, it is recommended that health care professionals determine their patients' use of herbal treatments and inform patients about the advantages and disadvantages of these treatments without prejudice.

Limitations

Data was collected via face-to-face interviews, and therefore the accuracy of responses could not be evaluated through long term observations.

References

- Akyürek S, Önal C, Kurtman C (2005) Akciğer kanserli hastalarda alternatif tedavi kullanımı (Alternative treatment in patients with lung cancer). *Türk Hematoloji-Onkoloji Dergisi* 15(2): 73-77.
- Algier LA, Hanoglu Z, Özden G, Kara F (2005) The use of complementary and alternative (non-conventional) medicine in cancer patients in Turkey. *European Journal of Oncology Nursing* 9(2 SPEC. ISS.): 138-146.
- Araz A, Harlak H, Meşe G (2007) Sağlık davranışları ve alternatif tedavileri kullanım (Use of health behaviors and alternative treatments). *TSK Koruyucu Hekimlik Bülteni* 6(2): 112-122.

- Avcı İA, Koc Z, Sağlam Z (2009) Use of complementary and alternative medicine by patients with cancer in northern Turkey: analysis of cost and satisfaction. *Journal of Clinical Nursing* 21(5-6): 677-688.
- Colbath JD, Prawlucky PM (2001) Holistic nursing care. *Nursing Clinics of North America* 16:1.
- Dedeli Ö, Karadakovan A (2011) Yaşlı bireylerde ilaç kullanımı, tamamlayıcı ve alternatif tedavi uygulamalarının incelenmesi (Drug use in elderly people, complementary and alternative treatment applications). *Spatula DD - Peer Reviewed Journal on Complementary Medicine and Drug Discovery* 1(1): 23-32.
- Deng GE, Cassileth BR, Cohen L, Gubili J, Johnstone PAS, Kumar N, et al. (2007) Integrative oncology practice guidelines. *Journal of the Society for Integrative Oncology* 5(2): 65-84.
- Erbaycu AE, Gülpek M, Tuksavul F, Uslu Ö, Güçlü SZ (2010) Akciğer kanserinde tamamlayıcı çeşitli bitkisel ve diğer karışımların kullanımına sosyo-demografik ve tümöre bağlı faktörlerin etkisi (Akciğer Kanserinde Tamamlayıcı Tedavi Kullanımı) [Impact of socio-demographic and locomotor factors on the use of various herbal and other herbal supplements in lung cancer (Complementary Therapy Use in Lung Cancer)]. *Turkish Thoracic Journal* 11: 117-120.
- Gözüm S, Tezel A, Koc M (2003) Complementary alternative treatments used by patients with cancer in Eastern Turkey. *Cancer Nursing* 26(3): 230-236.
- Gözüm S, Arıkan D, Büyükavcı M (2007) Complementary and alternative medicine use in pediatric oncology patients in eastern Turkey. *Cancer Nursing* 30(1): 38-44.
- Güven ŞD, Muz G, Ertürk NE, Özcan A (2013) Hipertansiyonlu Bireylerde Tamamlayıcı ve Alternatif Tedavi Kullanma Durumu (Use of Complementary and Alternative Treatment in Hypertensive Individuals). *Balıkesir Sağlık Bilimleri Dergisi* 2(3): 160-166.
- İnanç N, Şahin H, Çiçek B, Taşci S (2006) Use of herbs or vitamin/mineral supplements by patients with cancer in Kayseri, Turkey. *Cancer Nursing* 29(1): 17-20.
- James PB, Bah AJ, Kondorvoh IM (2016) Exploring self-use, attitude and interest to study complementary and alternative medicine (CAM) among final year undergraduate medical, pharmacy and nursing students in Sierra Leone: a comparative study. *BMC Complementary and Alternative Medicine* 16: 121.
- Jatau AI, Aung MMT, Kamauzaman THT, Chedi BAZ, Sha'aban A, Rahman AFA (2016) Use and toxicity of complementary and alternative medicines among patients visiting emergency department: Systematic review. *Journal of Intercultural Ethnopharmacology* 5(2): 191-197.
- Karagöz G (2006) *Sırt, boyun, bel ağrıları olan ve ameliyat programına alınan nöroşürürürji hastalarının ağrı gidermede kullandıkları tamamlayıcı ve alternatif tedaviler (Complementary and alternative therapies used by neurosurgeon patients with back, neck, back pain)*. M.Sc. Thesis, Institute of Health Sciences, Istanbul University, Turkey.
- Kav S, Hanoğlu Z, Algier L (2008) Türkiyede kanserli hastalarda tamamlayıcı ve alternatif tedavi yöntemlerinin kullanımı: Literatür taraması (Use of the literature of complementary and alternative therapies in cancer patients in Turkey). *Uluslararası Hematoloji-Onkoloji Dergisi* 18(1): 32-38.
- Mazicioğlu MM, Serin MS, Sahan H (2006) Attitude of patients with gynaecologic malignancies in selecting alternative and complementary Therapies. *MEJFM* 14: 12-15.
- NCCAM-National Center for Complementary and Alternative Medicine (2012) *What is Complementary and Alternative Medicine?*. Retrieved from <https://bit.ly/2HT52JT>.

- Özçelik H, Fadiloğlu Ç (2009) Kanser hastalarının tamamlayıcı ve alternatif tedavi kullanım nedenleri (Reasons for the use of complementary and alternative treatment of cancer patients). *Türk Onkoloji Dergisi* 24(1): 48-52.
- Özdemir L, Akdemir N, Akyar İ (2005) Hemşireler için geliştirilen yaşlı değerlendirme formu ve geriatrik sorunlar (Elderly evaluation form and geriatric problems developed for nurses). *Türk Geriatri Dergisi* 8: 94-101.
- Sağkal T, Demiral S, Odabaş H, Altunok E (2013) Kırsal kesimde yaşayan yaşlı bireylerin tamamlayıcı ve alternatif tedavi yöntemlerini kullanma durumları (Use of complementary and alternative treatment methods for elderly people living in rural areas). *Fırat Üniversitesi Sağlık Bilimleri Dergisi* 27(1): 19-26.
- Şarışen Ö, ve Çalışkan D (2005) Fitoterapi: Bitkilerle Tedaviye Dikkat (Fitotherapy: Herbal Medicine, Attention of in Primary Health Care). *Sted* 14(8): 182-187.
- Tas F, Ustuner Z, Can G, Eralp Y, Camlica H, Basaran M, et al. (2005) The prevalence and determinants of the use of complementary and alternative medicine in adult Turkish cancer patients. *Acta Oncologica* 44(2): 161-167.
- Tokem Y (2006) Astımlı hastalarda tamamlayıcı ve alternatif tedavi kullanımı (Use of complementary and alternative therapies in asthmatic patients). *Tüberküloz ve Toraks Dergisi* 54(2): 189-196.
- Uğurluer G, Karahan A, Edirne T, Şahin HA (2007) Ayaktan kemoterapi ünitesinde tedavi alan hastaların tamamlayıcı ve alternatif tıp uygulamalarına başvurma sıklığı ve nedenleri (The frequency and causes of recourse to complementary and alternative medicine applications of patients receiving treatment in remote chemotherapy unit). *Van Tıp Dergisi* 14(3): 68-73.
- Yavuz M, İlçe A, Kaymakçı Ş, Bildik G, Dıramalı A (2007) Meme kanserli hastaların tamamlayıcı ve alternatif tedavi yöntemlerini kullanma durumlarının incelenmesi (Examination of the use of complementary and alternative treatment methods of breast cancer patients). *Türkiye Klinikleri Journal of Medical Science* 27: 680-686.