

Traditional and Complementary Medicine use: Fibromyalgic Patients

Unsal o¹, Sendur of², Demirag s³

¹Department of Family Medicine, Adnan Menderes University, School of Medicine, Aydin, Turkiye.

²Department of Physical Therapy and Rehabilitation, Adnan Menderes University, School of Medicine, Aydin, Turkiye.

³Department of Family Medicine Adnan Menderes University, School of Medicine, Aydin, Turkiye.

Corresponding Author: Serpil Demirag, Department of Family Medicine, Adnan Menderes University, School of Medicine, Aydin, Turkiye. **E-Mail:** serpilden@yahoo.com

Received Date: 14th June 2022

Acceptance Date: 20th June 2022

Published Date: 22nd June 2022

Copyright: © 2022 Unsal o, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Aim

The aim of this study is to determine the Traditional and Complementary Medicine (TCM) use among patients with Fibromyalgia Syndrome (FMS), their perspective and if they benefited from these applications.

Method

This cross-sectional study was held in Adnan Menderes University Hospital, during 01/10/2019-01/02/2020. A face-to-face questionnaire was applied to consecutive volunteered FMS patients in outpatient clinic. The questionnaire consists of 3 sections and 34 questions, including the patients' sociodemographic, FMS-related features, and TCM-related questions.

Results

Of the 140 patients, 54.3% had stated that they used at least one TCM method. The most common methods were phytotherapy (43.4%), acupuncture (39.5%), cupping (21.1%), nutritional supplements (17.1%), and chiropractic (9.2%). 63.2% of the patients indicated that they consulted the doctor before using TCM. 77.6% of patients stated that they benefited from TCM methods and 72.4% of these patients were willing to recommend these methods to others.

Conclusion

The rate of TCM use and the rate of benefit from these methods were found to be high among FMS patients in our study.

Key words: fibromyalgia, traditional medicine, TCM, family medicine.

Introduction

Fibromyalgia Syndrome (FMS) is a chronic pain disorder characterized by generalized body pain, fatigue, sleep disturbance, cognitive and somatic dysfunction, affecting quality of life [1]. Its prevalence is between 2-8% and it is more common in women. It can occur at any age, including childhood. It is one of the most common musculoskeletal diseases [2]. In addition to these, some chronic conditions such as irritable bowel syndrome (IBS), chronic headache, depression, anxiety, restless legs syndrome, temporomandibular dysfunction, chronic fatigue syndrome, irritable bladder syndrome, dry mouth, dry eyes, and Reynaud phenomenon can be observed with FMS [3].

Today, FMS treatment can be divided into pharmacological, non-pharmacological and complementary therapies [4]. The aim of the treatment is to reduce the symptoms of the patients and increase their functional capacity, thus increasing their quality of life to a higher level. Among these methods, commonly used modalities are education, exercise, cognitive behavior therapy, complementary and alternative medicine. The most effective method in the treatment of FMS is multidisciplinary treatment approaches that combine pharmacological and non-pharmacological treatment methods [5].

The rate of application to TCM methods has increased in the last 30 years and therefore researches on these methods have become widespread [6]. In Turkey, especially after legislation arrangement, it becomes also well-known [7]. Recently, the frequency of studies in

the context of evidence-based medicine has increased [8]. The use of herbal medicine and nutritional supplements under the name of natural products in FMS is around 30-35%, regarding acupuncture this rate becomes 20% and the frequency of chiropractic use in FMS was 37% [9, 10, 11]. Mindfulness and meditative movements (such as Tai Chi, Yoga, Qi Yong) are methods used within the treatment program in patients with FMS. In a study, these methods are found as highly effective in patients with FMS [4]. Massage therapy is used at a rate of 44% in FMS, whereas the frequency of use of hypnotherapy is 3% [8]. Hydrotherapy is among the frequently used methods, and 26% of the patients are using pool therapy and 74% use hot water baths [12].

Family physicians play an important role in the treatment of this disease, as these patients firstly apply to the primary care. Family physicians encounter patients with FMS at a rate of 6% [3]. Although this rate can be evaluated as low, it is important to recognize the diagnosis and raise the awareness, as these patients suffered from chronic pain. TCM methods, which are used in the treatment of many diseases and have a great place in the treatment of FMS, should be sufficiently recognized and known by family physicians [13].

As TCM use seems to be high in the literature, the aim of this study is to evaluate the rate and the effectiveness of these applications in treatment of FMS and the patients' perspectives on TCM methods. Our secondary aim is to emphasize the importance of evaluating the patients regarding TCM modalities and the doctors' attention to this issue, so that the FMS patients can get a complete care and can feel that their beliefs, perspective are regarded.

Materials and Method

This cross-sectional study included patients applied to the Aydın Adnan Menderes University Hospital Physical Medicine and Rehabilitation Day care clinic between 01/10/2019-01/02/2020. Consecutive FMS patients aged 18-65, who were voluntary and capable of completing the questionnaire, were included in the study. A face-to-face questionnaire was applied to the patients. The questionnaire (which was created by the researchers by scanning the relevant literature) consisted of 34 questions in three sections, the sociodemographic characteristics of the patients, the characteristics related to FMS and the questions about TCM. Although this study was voluntary-based and self-reported, verbal informed consent was obtained from each patient. This study was also approved by Ethical Council of the School (Date: 11.07.2019, Verdict Nr: 7).

Data were evaluated using SPSS 18 statistical program. Statistical significance level was accepted as $p < 0.05$.

Results

140 patients accepted to participate. Of the total, 135 were women (96.4%). The mean age was 46.3 ± 9.8 and 72.9% of them were between 40-65 years old. 85.7% were married, 71.4% were housewives. 96.4% of the patients were using medical drugs.

Illness duration was generally over three years (59.3%). During the last year, 46.4% patients applied to the health care institutes at least five times. 38.6% of patients applied 3-5 times, 11.4% less than 3 and only five patients never applied in the last one year. Generally, patients suffered from many complaints at the same time. The most common complaint was generalized body pain (93.6%). Other common complaints were fatigue (84.3%), sleep disturbances (78.6%) and morning stiffness (77.1%).

Co-morbid situations were also common in our patients (83 patients). The most common disease was hypertension (24.3%). The other common diseases were type 2 diabetes (28.9%) and hypothyroidism (19.2%).

Of the total, 115 patients (82.1%) stated that they did not get any education or training about the FMS. About only one third of patients (30.7%) had regular exercise programming mostly jogging (29 patients).

54.3% stated that they used at least one TCM method. The most commonly used methods are; phytotherapy, acupuncture, cupping, nutritional supplements, and chiropractic. 63.1% stated that they consulted a doctor before using TCM. 77.6% of the patients benefited from TCM methods and 72.3% of them would recommend these methods to others (**Table 1**).

No significant difference was found between TCM use and sociodemographic features such as gender, age, etc. ($p > 0.05$). The patients with depression, anxiety disorder, and hypothyroidism were using TCM mostly ($p = 0.020$; $p = 0.021$; $p = 0.016$, respectively). Patients who had no bowel problems also tended to use TCM ($p = 0.04$). There was no significance between TCM use and other clinical features (**Table 2**).

Discussion

Patients prefer TCM methods very often in many chronic diseases, especially in rheumatologic diseases, where conventional treatments cannot provide sufficient benefit [8]. According to World Health Organization (WHO), it has been reported that the frequency of TCM use in North America, Europe and Australia is around 50% and most common method is phytotherapy [14]. The increase in TCM application rates may be due to the increasing number of chronic diseases.

Table 1. Characteristics of Patients Regarding TCM.

	n (%)
State of knowledge about TCM Methods	
No	19 (13.6)
Yes	12 (8.6)
Partially	109 (77.9)
Case of using any TCM Method	
I do not use	64 (45.7)
I use	76 (54.3)
Phytotherapy Products (n=33)*	
Ready-made herbal preparations	16 (48.5)
Horse chestnut cream	9 (27.3)
Other***	11 (33.3)
Nutritional Supplements (n=13)	
Magnesium	9 (69.2)
Multi-vitamin preparations	4 (30.8)
Reasons for using TCM (n=76)*	
Due to lack of medical treatment	25 (32.8)
Medical treatment side effect	12 (15.7)
Because they are natural and harmless	30 (39.4)
On other patients' recommendation	20 (26.3)
On doctor's recommendation	39 (51.3)
TCM learning Resources (n=76)*	
Media	16 (21)
Health workers	46 (60.5)
Relatives	26 (34.2)
Other patients	7 (9.2)
Spice Shop	4 (5.2)
Consultation with a Doctor Before using TCM (n=76)	
No	28 (36.8)
Yes	48 (63.1)
Benefit from TCM Methods (n=76)	
No	17 (22.3)
Yes	59 (77.6)
If yes, What Benefit? (n=59)*	
Pain decreased	31 (52.5)
Pain vanished	13 (22)
There was temporary relief	10 (16.9)
I felt good	5 (8.4)
Side effects of TCM Methods (n=76)	
No	73 (96)
Yes	3 (3.9)
Which Treatment is more Effective? (n=76)	
TCM	17 (22.3)
Medical treatment	28 (36.8)
Both of them	31 (40.7)
Recommendation of TCM Methods to Others (n=76)	
No	21 (27.6)
Yes	55 (72.3)

n: Number of patients; %: Row Percentage

* More than one answer was given.*** Jasmine tea, tea tree cream, sycamore leaf, canola oil, juniper, nettle tea, horsetail grass, horsetail grass, okra seed, green tea, matcha tea.

Table 2. Some Clinical Features of the Patients.

	TCM Use (n=140)		P
	Yes (n=76)	No (n=64)	
	n (%)	n %	
Disease Duration			
Less than 3 years	26 (45.6)	31 (54.4)	0.08
More than 3 years	50 (60.2)	33 (39.8)	
First application complaint Common Body Pain			
Yes	73 (55.7)	58 (44.3)	0.3
No	3 (33.3)	6 (66.7)	
Tiredness			
Yes	63 (53.4)	55 (46.6)	0.62
No	13 (59.1)	9 (40.9)	
Sleeping disorder			
Yes	59 (53.6)	51 (46.4)	0.76
No	17 (56.7)	13 (43.3)	
Morning Sickness			
Yes	56 (51.9)	52 (48.1)	0.28
No	20 (62.5)	12 (37.5)	
Depression			
Yes	36 (66.7)	18 (33.3)	0.02
No	40 (46.5)	46 (53.5)	
Anxiety Disorder			
Yes	13 (81.3)	3 (18.8)	0.02
No	63 (50.8)	61 (49.2)	
Memory Problems			
Yes	24 (50)	24 (50)	0.46
No	52 (56.5)	40 (43.5)	
Bowel Problems			
Yes	8 (34.8)	15 (65.2)	0.04
No	68 (58.1)	49 (41.9)	
Headache			
Yes	17 (56.7)	13 (43.3)	0.76
No	59 (53.6)	51 (46.4)	

Number of Applications in the last 1 Year			
Less than 3	11 (52.4)	10 (47.6)	0.2
5-Mar	25 (46.3)	29 (53.7)	
More than 5	40 (61.5)	25 (38.5)	
Is there any disease other than FMS?			
Yes	45 (54.2)	38 (45.8)	0.98
Hypertension			
Yes	17 (50)	17 (50)	0.52
No	28 (57.1)	21 (42.9)	
Diabetes			
Yes	13 (54,2)	11 (45.8)	0.99
No	32 (54,2)	27 (45.8)	
Hypothyroidism			
Yes	13 (81,3)	3 (18.8)	0.01
No	32 (47,8)	35 (52.2)	
Asthma or COPD			
Yes	6 (42,9)	8 (57.1)	0.34
No	39 (56,5)	30 (43.5)	
Other Rheumatologic Diseases			
Yes	3 (42.9)	4 (57.1)	0.69
No	42 (55.3)	34 (44.7)	

Individuals with chronic diseases apply to TCM methods more than normal healthy individuals [15].

In our study, the rate of use of TCM was more than half of the patients. According to a study, the rate of patients with FMS using any TCM method is almost 100% [8]. In another study, Nicassio et al. declared that 98% of the patients had applied at least one TCM treatment in the last 6 months, and that the main factors driving such treatments were pain severity and disability [16]. Wahner-Rodler et al. stated that 98% of patients applied TCM and 45% were praying, 44% massage, 37% chiropractic, 35% C and 31% vitamin E use, 29% magnesium, 25% complex B vitamins and 24% green tea during the treatment period [9]. In another study by Wall et al., 92.6% of 115 FMS patients used at least one TCM. 92.2% exercise, 48.1% chiropractic, 45.8% diet and lifestyle change, 44.9% relaxation therapy, 36.5% reported with nutritional supplements [17]. Although there is no study in the literature investigating the frequency of TCM use only in

the rate of TCM methods in chronic rheumatic diseases as 49.3% and phytotherapy was the most preferred method with 58.1% [18]. In Aydin et al.'s population-based study, 58% of the participants stated that they had used at least one TCM method in the previous year and more than half of them preferred herbal products [19].

In a study conducted with patients with FMS, it was found that patients mostly used TCM methods due to pain severity and disability [16]. In another study investigating the use of TCM in patients with chronic rheumatic disease, 75.6% of the patients believed that TCM methods would improve, 11.5% did not benefit from medical treatment to prevent medical drug side effects, and 5.1% did not benefit from medical treatment. It has been reported that 5.1% of them use it on the recommendation of other people, and 1.8% just out of curiosity [18]. Although there are differences between studies, TCM methods can be generally preferred by patients who do not

fully recover with medical treatment and who want to get rid of FMS symptoms that impair the quality of life. Our patients use generally based on doctor's recommendation. About 3/5 of our patients using TCM consulted a doctor before using. Almost all of patients stated they would recommend these methods to other FMS patients. In a study on patients with rheumatic disease, 39.5% of the patients using TCM consulted their physicians [20]. In a study conducted with diabetes patients in Thailand, 35.6% of patients using TCM shared the methods they used with their physicians [21]. These differences may be due to the sociocultural or legislative variety of the countries.

3/4 of our patients stated that they benefited from TCM methods. In another study in patients with FMS, although a rate was not specified, most of the participants stated that they benefited from TCM methods [17]. Wahner et al. stated that the majority of their patients benefited from TCM methods [9]. Nural et al. determined the rate of patients who benefited from TCM as 79.8% [15]. In general, our finding is similar.

We found a very low rate of side effects from TCM methods. In the study of Nural et al., the rate of adverse effects was 5.4% [15]. In a study conducted in patients with lung cancer, side effects were seen in 6.6% (22). This can be explained by our patients' sharing their TCM use and experiences with their physicians, as well as the possible of side effects and how to reduce them.

In our study, no relationship was found between the sociodemographic features and TCM use. In United States of America, TCM use was more common among females, among people with higher education levels and people with high income level [23]. However, in another study conducted in cancer patients, no relationship was found between TCM use and sociodemographic features [24]. Again, in another study in our

country, in which the use of TCM in rheumatologic diseases was investigated, no relationship was found between sociodemographic characteristics and the use of TCM [20]. On the other hand, in other studies in Turkey, TCM use are found to be common among females, among people with low socioeconomic level and among the elderly [19, 25, 26]. These differences can be due to researchers' focus on the different parts of the population.

In our study, no significant relationship was found between the duration of illness and the use of TCM. Up to date, we cannot reach any study investigating this issue. Nural et al. examined the use of TCM in many chronic diseases, but no significant relationship was found between the duration of the illness and TCM use [15].

In our study, FMS patients with depression and anxiety disorders were more likely to use TCM. Hansen et al. investigated the application status of patients with anxiety and depression to TCM services, and showed these patients applied to these services at a significantly higher rate [27]. This can be due to the fear of stigmatizing. In our study, we found that patients who had no bowel problems used TCM at a significantly higher rate comparing those who had. Magge et al., in a review study, evaluated the use of TCM in patients with IBS and the rate was 21-50% [28].

In our study, FMS patients with hypothyroidism had a significantly higher rate of TCM use than those without. Brake et al. investigated the use of TCM in thyroid patients, and they found that 79% of the patients use TCM [29].

Limitations of our study are; being a questionnaire-based study and not being a population-based one, so that we cannot generalize these results to our population. As we cannot reach any study on this subject in our country in the literature, it can be evaluated as a preliminary and pioneer study. In general, as there are few studies on the use of TCM in patients with FMS, it can contribute on this issue.

Conclusion

The rate of TCM use and the rate of benefit from these methods were found to be high. Our patients learn these methods mostly from healthcare professionals. Asking each patient about TCM use and encouraging them to share their experiences with their physicians can be effective in preventing misuse and can make a progress in the outcome.

TCM applications, which have an important role in the treatment of FMS, are also used excessively by our patients. Each patient can be questioned in a non-judgmental language, in terms of TCM use. Brief information can be given to the patients about the possible side effects and interaction with medical drugs. Besides, physicians should educate or train themselves about these issues. So that, we can provide better comprehensive and collaborative health care to our patients.

Acknowledgement

We thank to BE Oladapo for his contribution in English editing.

12. Conflict of Interest

None

13. Funding

None

References

1. Hawkins RA (2013) Fibromyalgia: a clinical update. *J Am Osteopath Assoc.* 113 (9): 680-689.
2. Aaron LA, Buchwald D (2001) A review of the evidence for overlap among unexplained clinical conditions. *Ann of Intern Med.* 134 (9 Pt 2): 868-881.
3. Evcik D, Ketenci A, Sindel D (2019) The Turkish Society of Physical Medicine and Rehabilitation (TSPMR) guideline recommendations for the management of fibromyalgia syndrome. *Turk J Phys Med Rehabil.* 65 (2): 111-23.
4. Shorofi SA, Arbon P (2017) Complementary and alternative medicine (CAM) among Australian hospital-based nurses: knowledge, attitude, personal and professional use, reasons for use, CAM referrals, and socio-demographic predictors of CAM users. *Complementary therapies in clinical practice.* 27 (9): 37-45.
5. Wahner-Roedler DL, Elkin PL, Vincent A, (2005) et al. Use of complementary and alternative medical therapies by patients referred to a fibromyalgia treatment program at a tertiary care center. *Mayo Clin Proc.* 80 (1): 55-60.
6. Bombardier CH, Buchwald D (1996) Chronic fatigue, chronic fatigue syndrome, and fibromyalgia: disability and health-care use. *Medical Care.* 34 (9): 924-930.
7. Kalichman L. (2010) Massage therapy for fibromyalgia symptoms. *Rheumatol Int.* 30 (9): 1151-1157.
8. Bennett RM, Jones J, Turk DC, et al. 2007 An internet survey of 2,596 people with fibromyalgia. *BMC Musculoskeletal Disorders.* 8 (1): 27.
9. Complementary and Alternative Medicine in the United States. <https://www.ncbi.nlm.nih.gov/books/NBK83799/>

10. Nicassio P, Schuman C, Kim J, et al. 1997 Psychosocial factors associated with complementary treatment use in fibromyalgia. *J Rheumatol.* 24 (10): 2008-2013.
11. Wall GC, Krypzel LL, Miller MJ, et al. 2007 A pilot study of complementary and alternative medicine use in patients with fibromyalgia syndrome. *Pharm Pract (Granada).* 5 (4): 185-190.
12. Karadag A, Hayta E, Kaptanoglu E, et al. 2018 Complementary and alternative treatment methods in chronic rheumatic diseases in the Central Anatolia. *Electronic Journal of General Medicine.* 15 (4): 2-5.
13. Aydin S, Bozkaya AO, Mazıcıoğlu MM, et al. 2008 What influences herbal medicine use?-prevalence and related factors. 38 (5): 455-63.
14. Ulusoy H, Gucer TK, Murat A, et al. 2012 The use of complementary and alternative medicine in Turkish patients with rheumatic diseases. *Archives of Rheumatology.* 27 (1): 31-37.
15. Moolasarn S, Sripa S, Kuessirikiet V, et al. 2005 Usage of and cost of complementary/alternative medicine in diabetic patients. *J Med Assoc Thai.* 88 (11): 1630-1637.
16. Barnes PM, Bloom B, Nahin RL. 2008 Complementary and alternative medicine use among adults and children: United States, 2007. *Natl Health Stat Report.* 10 (12): 1-23.
17. Ugurluer G, Karahan A, Edirne T, et al. 2007 The prevalence and causes of the use of complementary and alternative medicine in patients treated at an outpatient chemotherapy unit (In Turkish). <https://vantipderg.org/jvi.aspx?un=VTD-63600>. *Van Med J.*
18. Hansen AH, Kristoffersen AE. 2016 The use of CAM providers and psychiatric outpatient services in people with anxiety/depression: a cross-sectional survey. *BMC Complement Altern Med.* 16 (1): 450-461.
19. Magge S, Lembo A. 2011 Complementary and alternative medicine for the irritable bowel syndrome. *Gastroenterol Clin North Am.* 40 (1): 245-253.
20. Brake MK, Bartlett C, Hart RD, et al. 2011 Complementary and alternative medicine use in the thyroid patients of a head and neck practice. *Otolaryngol Head Neck Surg.* 145 (2): 208- 212.