



ORIGINAL RESEARCH

Use of Complementary and Alternative Medicine with Osteoarthritis Patients

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Abstract

Introduction: The treatment of Osteoarthritis (OA) includes pharmacologic and non-pharmacologic methods. In getting no response to traditional medical treatment it causes the use of effective and confident treatment of OA and as a result patients tend to use Complementary and Alternative Medicine (CAM).

Methods: This study which is a descriptive type has been done on patients with OA in case of defining the use of CAM. This study has been done on patients who applied to physical therapy polyclinics. The sample of the study covers 77 patients with OA. In accumulating the data questionnaire form has been used. The data were evaluated by computer, percentage and chi-square.

Results: In our study it has been found out that 23.4% of OA patients used CAM. In applying CAM methods it has been determined that 66.6% used massage, 38.8% used diet and 33% used music. 83.3% of patients using CAM with the notice of a doctor whereas 16.7% without it. Marital status, birth place and income conditions in relation with the use of CAM have been statistically significant ($p < 0.05$), gender, age, educational status and occupation in relation with the usage of CAM have been statistically insignificant ($p < 0.05$).

Conclusions: At physical therapy polyclinics working nurses when receiving in service training CAM methods should be added to make them well equipped. It is also suggested that the staff working in health departments should follow researches based on facts including CAM methods and its effects.

Keywords

Complementary and alternative medicine, Osteoarthritis, Nursing

Introduction

Osteoarthritis (OA) is a joint disease which is seen part of the rising age in people, which results in aching and disability and that's why it has got a negative effect on the quality of life [1]. With the rising number of the elder people in the population (society) OA has become a significant health problem. In the USA OA has been seen 3% among people aged 30 and over [2], people aged 45 and over have been seen between 19.2%-27.8% [3]. In a study made in Turkey OA prevalence has been reported to be 14.8% [4].

The treatment of OA includes pharmacologic and non-pharmacologic methods. In getting no response to traditional medical treatment it causes the use of effective and confident treatment of OA and as a result patients tend to use CAM. In USA, among the patients who complain about arthritis rank the sixth place. It is estimated that among those patients having OA the percentage is quite high [5].

As a result of rising concern of CAM among individuals the need of CAM has been tried to be fulfilled by people apart from health staff [6]. The resulting of this condition, nurses whose aims are to supply the health needs of human beings the role of CAM has become compulsory. In this direction the usage of CAM's in nursing intervention development, effective strategy determination and guidance of individuals concerning the usage of CAM effectively and correctly are expected [7].

Material and Methods

This is descriptive study on patients admitted to the physical therapy polyclinics of the Nevşehir İ. Şevki Atasagun State Hospital, Nevşehir, Turkey in 2015.

The subjects of this study were 77 patients with OA admitted to the physical therapy polyclinics. Each participating patient was administered a survey questionnaire, filled out through a face-to-face interview in the physical therapy polyclinics. Before performing this study approval was obtained by the Directory of Health Services of the Province of Nevşehir and by the patients. The pilot test involved the researcher distributing the questionnaire to ten people with OA at state hospital.

The patients were administered in clinical wards a survey questionnaire consisting of 23 questions; 7 of which were on demographics, 9 on the OA records, and the remaining 7 on whether, how and why they have used CAM.

A chi-square test was used to chart comparisons between demographic groups. All variables are included as categorical in this analysis. Univariate and multivariate logistic regression analysis was applied to determine which factors are determinants of CAM use. The variables statistical significant in the chi-square test (gender, age, marital status, educational status, birthplace, income and occupation) was applied. The data were recorded and analyzed by using computer.

Before starting the research, the patients were informed about the purpose of the research and the data collection tools to be used and their approvals were obtained.

Results

We included 77 patients, of whom 79.2% were women, 51.9% over the age of 60, 53.2% married, 48.1% retired, 32.5% high school graduates, 51.9% living in the city and 61.0% had a middle income in the age group (Table 1).

It has been designated that 23.4% of OA patients have been using CAM. 66.6% of CAM users have been using the massage method, 83.3% have preferred it to treat the disease, 83.3% have shared it with the doctor, 44.4% have trusted the effectiveness of CAM, 61.1% have had the source of knowledge from TV/radio and 55.5% have used it by the recommendation of the doctor (Table 2).

Birth place and income conditions in relation with the use of CAM have been statistically significant ($p < 0.05$), marital status, gender, age, educational status and occupation in relation with the usage of CAM have been statistically insignificant ($p < 0.05$) (Table 3).

Discussion

The results of most of the studies on patients with OA show that most patients are women [4]. In this study 79.2% of women made the number of patients. The reason why OA is more seen among women can be explained by their sex hormones [2]. The result of this study which supports other studies; the nurses should determine the changeable risk factors of women with OA and should also plan and apply nursing intervention in order to eliminate the risk factors.

It has been stated that with the age the OA prevalence has been rising [3,8]. In this study 51.9% of patients with OA were at the age 60 and over.

Table 1: Demographic factors of patients (N = 77).

Variables		Frequency (%)	Variables		Frequency (%)
Gender	Women	61 (79.2)	Marital Status	Married	42 (53.2)
	Men	16 (20.8)		Bachelor	3 (3.9)
Age Group	Under 30	2 (2.6)		Widowed	32 (42.9)
	30-39	5 (6.5)	Educational Status	Illiterate	5 (6.5)
	40-49	7 (9.1)		Literate	37 (48.1)
	50-59	23 (29.9)		Primary school	4 (5.2)
	Over 60	40 (51.9)		High school	25 (32.5)
Place of Birth	City	13 (16.9)	Graduate	6 (7.8)	
	Town	22 (28.6)	Occupation	Retired	37 (48.1)
	Small Town	15 (19.5)		Government	8 (10.4)
	Village	27 (35.1)		Official worker	4 (5.2)
Home	City	40 (51.9)		Housewife	28 (36.4)
	Town	29 (37.7)	Income	Low	21 (27.3)
	Small Town	6 (7.8)		Middle	47 (61.0)
	Village	2 (2.6)		High	9 (11.7)

Table 2: Distribution of patients using CAM (N = 77).

Factors		Frequency (%)
CAM Usage (n:77)	Users	18 (23.4)
	Non-users	59 (76.6)
Method of CAM usage* (n:18)	Massage	12 (66.6)
	Diet	7 (38.8)
	Music	6 (33.3)
	Herbs	3 (16.6)
	Acupuncture	2 (11.1)
Reasons for CAM usage* (n:18)	Treatment of the disease	15 (83.3)
	Getting worse	12 (66.6)
	Relief the pains	11 (61.1)
	Relief the worries	7 (38.8)
	Physical comfort	7 (38.8)
	No other remedy	5 (27.7)
	Getting over the disease	5 (27.7)
	Lack of financial condition	3 (16.6)
	Last remedy/last hope	3 (16.6)
	Curious	2 (11.1)
	Lessen the side-effects of medicine taken	2 (11.1)
	having done all the best	2 (11.1)
	Not happy with the treatment	2 (11.1)
	Nurse recommendation	1 (5.5)
Doctor recommendation	1 (5.5)	
CAM usage shared with doctor (n:18)	Shared	15 (83.3)
	Non-shared	3 (16.7)
Trust the effectiveness of CAM (n:18)	Trust	8 (44.4)
	Non-trust	10 (55.6)
Source knowledge of CAM usage* (n:18)	TV/Radio	11 (61.1)
	Family members	3 (16.6)
	Friend	4 (22.2)
	Doctor	7 (38.8)
	Nurse	2 (11.1)
	Book	2 (11.1)
	Magazine	1 (5.5)
	Internet	2 (11.1)
Person recommending CAM method* (n:18)	Doctor	10 (55.5)
	Nurse	5 (27.7)
	Family members	4 (22.2)
	By another OA patient	3 (16.6)
	Neighbor	2 (11.1)

*More than one reply has been given.

The aim of OA treatment should be lessen the pain, protecting the joints, provide physical function independency and raising the quality of life. In order to reach the aims the OA treatment should involve nonpharmalogical, pharmacological and when needed, surgery meth-

ods. The treatment should be applied to each patient in a special way. European League against Rheumatism (EULAR), Osteoarthritis Research Society International (OARSI) suggest in the effective OA treatment methods both the pharmacological and non-pharmacological combi-

Table 3: The comparison between the demographic variables and the usage of CAM.

Demographic Variables		Usage of CAM			
		User	Non-user	TOTAL	Test χ^2 p
		Frequency (%)	Frequency (%)	Frequency (%)	
Gender	Women	15 (83.3)	46 (77.6)	61 (78.9)	$\chi^2 = 0.241$ $p = 0.623$
	Men	3 (16.7)	13 (22.4)	16 (21.1)	
Age	Under 30	0 (0.0)	3 (5.1)	3 (3.9)	$\chi^2 = 4.724$ $p = 0.317$
	30-39	1 (5.5)	3 (5.1)	4 (5.2)	
	40-49	2 (11.1)	5 (8.5)	7 (9.1)	
	50-59	8 (44.4)	15 (25.4)	23 (29.9)	
	Over 60	7 (38.9)	33 (55.9)	40 (51.9)	
Marital Status	Married	15 (78.9)	26 (44.8)	41 (53.2)	$\chi^2 = 3.750$ $p = 0.153$
	Bachelor	0 (0.0)	3 (5.2)	3 (3.9)	
	Widowed	4 (21.1)	29 (50.0)	33 (42.9)	
Educational Status	Illiterate	2 (10.5)	3 (5.2)	5 (6.5)	$\chi^2 = 9.442$ $p = 0.051$
	Literate	5 (26.3)	32 (55.2)	37 (48.1)	
	Primary school	0 (0.0)	4 (6.9)	4 (5.2)	
	High school	10 (52.6)	15 (25.9)	25 (32.5)	
	Graduate	2 (10.5)	4 (6.9)	6 (7.8)	
Place of Birth	City	4 (21.2)	9 (15.5)	13 (16.9)	$\chi^2 = 10.989$ $p = 0.012$
	Town	10 (52.6)	12 (20.7)	22 (28.6)	
	Small Town	1 (5.3)	14 (24.1)	15 (19.5)	
	Village	4 (21.1)	23 (39.7)	27 (65.1)	
Income	Low	3 (15.8)	18 (31.0)	21 (27.3)	$\chi^2 = 10.854$ $p = 0.004$
	Middle	10 (52.6)	37 (63.8)	47 (61.0)	
	High	6 (31.6)	3 (5.2)	9 (11.7)	
Occupation	Retired	8 (42.1)	9 (30.0)	17 (48.1)	$\chi^2 = 3.641$ $p = 0.303$
	Government official	4 (21.1)	4 (6.9)	8 (10.4)	
	Worker	1 (5.3)	3 (5.2)	4 (5.2)	
	Housewife	6 (31.6)	22 (37.9)	28 (36.4)	

nation [9,10]. Getting no response in the conventional OA treatment makes way to new effective and confidential methods which leads patients more and more to use CAM applications. In the USA among patients using CAM rank place 6 with arthritis symptoms. Among those patients the percentage of OA patients is estimated to be high [5]. In a study made on patients with OA the prevalence of CAM use has been found 40% [11]. Likewise in a study made on South Australians the result of the CAM usage was 52.2% [12], in the USA 28% [13], in Spain the outcome was 65.5% [14]. In this study it has been found out that 23.4% of patients with OA have used CAM. At the end of this study it has been stated that the use of CAM has been lower compared to other studies and the reason for this has been that most patients shared their using CAM with doctors (83.3%) and because of this doctors might have been effective in giving up the CAM usage.

The most commonly usage of CAM among patients

with OA are stated as follows; herbals, massage, vitamins, energy therapy and homeopathy [15]. Zochling, et al. in his study stated that the OA patients in using CAM was commonly the use of vitamins [16]. Kaboli, et al. in his study stated that the OA patients in using CAM was commonly the use of prayers [13]. In the results of this study the outcomes of using CAM are respectively massage, diet, music, herbals and acupuncture.

The reason of the usage of massage applied by most patients with OA within the use of CAM methods might have been suggested by doctors and might have been applied to relieve the pains of patients.

Data on CAM can be obtained from different sources. The most important sources are mass media means. Araz, et al. and Algier, et al. reported their studies to obtain data of CAM to be respectively TV/radio, books/magazine and newspaper [17,18]. In this study TV/radio have been the sources to have obtained data about CAM methods. This result has

shown that the means of mass media have been effective in leading people to the usage of CAM methods and as a result of this in conveying the data it should be done professionally.

Today most patients use CAM in order to feel better [19]. The reasons of the usage of CAM within patients having cancer are firstly to contribute to the treatment, to prevent the reoccurrence of the disease and as a last remedy [20]. The results of this study has shown similar outcomes with other studies which suggests the improvement of the condition concerning the disease.

It has been stated that CAM methods have been preferred mostly by women whereas the statistical outcomes don't show significant correlation between them [21-26], Kaboli, et al. [13] has stated in his study that women have used CAM commonly and pointed out that there is a significant correlation between the gender and CAM usage. In this study women have used CAM more than men and statistically the correlation is insignificant ($p > 0.05$).

In this study the results have shown that marital status, birth place and income conditions in relation with the use of CAM have been statistically significant ($p > 0.05$), gender, age, educational status and occupation in relation with the usage of CAM have been statistically insignificant ($p > 0.05$).

Most studies show that the usage of CAM has been among young patients more than compared to other ages [27-33]. In this study the usage of CAM covered the ages 50-59 and has been more compared to other age groups.

Looking at studies show that marital status in relation with the use of CAM has been not statistically insignificant [34-36]. This study shows that among married people the CAM usage is the most.

There are studies which support the ineffective usage of CAM concerning the educational status [24,37,38]. There are also studies which show a significant correlation between the educational status and the usage of CAM and it is stated that the higher the educational status is the more the usage of CAM is [22,23,26,39,40].

Studies different from these show that the lower the educational status is the more is the usage of CAM [41,42]. This study shows that high school graduates compared to other educational status groups were higher in using CAM.

In the studies which have been done the living place has not been effective on the usage of CAM [24,38]. Ceylan, et al. [40] has stated that the living place has been effective on the usage of CAM and more widespread among people living in cities. In this study the result shows that those born in towns have used CAM more in respect with the others.

In studies which have been done comparatively on the status of income and the usage of CAM have shown that the higher is the income the more is the usage of CAM [23,26,40]. In this study the result shows that the medium income status has used more CAM compared to the other income status.

Conclusion

The result of this study confirms that OA patients used CAM. At physical therapy polyclinics working nurses when receiving in service training CAM methods should be added to make nurses well equipped. It is also suggested that the staff working in health departments should follow and update researches based on facts including CAM methods and its effects.

Limitation of the Study

This study is limited with patients who applied at the physical therapy polyclinics at the Nevşehir İ. Şevki Atasagun State Hospital.

Acknowledgements

We would like to thank the patients with OA admitted to the physical therapy polyclinics in this study for their participation and cooperation.

Financial Support and Sponsorship

None.

Conflict of Interest

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

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