Research Article

Complementary and alternative medicine use in medical OPD patients of rheumatoid arthritis in a tertiary care hospital

Shamiya Sadiq, Sharminder Kaur, Vijay Khajuria, Sapna Gupta, Aman Sharma

Department of Pharmacology, Govt. Medical College, Jammu, Jammu & Kashmir, India.

Correspondence to: Shamiya Sadiq, E-mail: drshamiya31621@gmail.com

Received March 16, 2016. Accepted March 29, 2016

Abstract

Background: Complementary and alternative medicine (CAM) use is high among chronic illness like arthritis to derive additional benefits **Aim and Objective:** To examine CAM use among rheumatoid arthritis (RA) patients. **Materials and Methods:** The study was conducted in 100 patients having rheumatoid arthritis reporting to medical OPD of tertiary-care hospital. Patients were asked to respond to a predesigned questionnaire pertaining to demographic profile and CAM usage. **Result:** CAM use was high among RA (60%) patients more so with longer duration of disease (81.66%). Majority of patients were from rural background (80%) above 40 years age (87%) and were females. Of all, 75% patients took to CAM after anti-rheumatoid drugs and lack of relief was the main reason. Ayurveda was most common type of CAM (35%) used and relatives were the principal source of information (58.33%). Most of the patients (61.66%) of rheumatoid arthritis reported relief with CAM. **Conclusion:** CAM use is high among RA patients especially in females and patients with longer duration of disease. Lack of benefit from anti-rheumatoid drugs was the main reason of CAM usage. Ayurveda was the most common type of CAM used. Therefore, the outcome of the study calls for the attention of treating physician regarding CAM use as some orally used CAM therapies can be harmful due to possibility of interactions and heavy metals.

KEY WORDS: Complementary and alternative medicine; CAM; rheumatoid arthritis; anti-rheumatoid drugs; tertiary care

Introduction

Complementary medicine refers to the use of non-conventional therapy, in conjunction with regular treatment, whereas alternative medicine refers to the use of non-conventional treatment. Complementary and alternative medicine (CAM) comprises more than 100 forms of treatment.[1] CAM includes therapies such as acupuncture, chiropractic, herbal medicine, homeopathy, and osteopathy; complementary therapies such as aromatherapy, massage, yoga, meditation, hypnotherapy, Alexander technique, shiatsu, reflexology and counselling stress therapy, and alternative disciplines, for example, traditional Chinese medicine, traditional Indian medicine (Ayurveda), anthroposophical medicine, naturopathy as well as crystal therapy, dowsing, iridology, and kinesiology.[2]

Access this article online	
Website: http://www.njppp.com	Quick Response Code:
DOI: 10.5455/njppp.2016.6.23022016132	

The prevalence of CAM use in general population is high and range between 9.8% and 76%.[2,3] CAM attracted attention in the USA because of its widespread use, and association with increased economic burden for patients as well as possibility of side effects.[4] CAM has witnessed an increase in use in recent times not only in north America, Europe, and Australia but also in Asian countries including India.[5] CAM has been in practice in India for thousands of years.[3] India is the birth place of one of the oldest systems of medicine, ayurveda, which has its origin around 2000 years back and is the most commonly

practiced form of CAM. About 80% Indian patients use ayurvedic therapy particularly in chronic illnesses.[3,5,6]

Large number of patients (60–90%) with chronic arthritis such as osteoarthritis, rheumatoid arthritis, and other arthritic conditions use CAM.[6,7] The prevalence of rheumatoid arthritis (RA) in the adult population in India is approximately 0.75%. Rheumatoid arthritis is the most common autoimmune inflammatory joint disease seen in clinical practice.[5] The prevalence of CAM use in RA patients has been reported to vary from 20% to 86%.[8]

Despite early detection and availability of treatments to slow progression, still no definitive cure exists for RA. Therefore, patients with active RA suffer from significant decline in functional capacity and 40% become work disabled within 5 years from onset of symptoms.[7,8] Proper management of RA is targeted to reduce pain, functional limitations, and enhance well-being.[6,9] Therefore, patients with RA often look to CAM for additional sources of relief.[10] Therefore, this study was carried out to examine use of CAM in patients of RA reporting in medical OPD of a tertiary-care hospital.

Materials and Methods

A cross-sectional observational study was undertaken after clearance from institutional ethics committee to evaluate use of CAM in patients of RA in a tertiary care hospital. A total of 100 patients of RA on anti-rheumatoid treatment were evaluated with a face-to-face conversation cum interview along with a predesigned questionnaire with regard to demographics, disease characteristics and the use of CAM, its type, and pattern. The questionnaire was based on our study objectives and conducted in department of pharmacology in collaboration with department of medicine to assess the use of CAM among patients of rheumatoid arthritis attending medical/rheumatology OPD in Government Medical College, Jammu, India. Each participant was asked to answer the questions in the form of options which he/she feels is appropriate.

A patient was termed a CAM user if he/she had ever tried CAM for RA till the time of the study. A CAM nonuser was defined as one who had never used any CAM therapy for RA or its sequelae.[5]

The questionnaire consisted of two parts: The first part pertained to a collection of sociodemographic information and serological status of the patient: age, gender, residence, occupation, marital status, education, socioeconomic status, duration of disease, use of anti-rheumatoid drugs, seropositivity, ESR.

The second part addressed questions related to CAM its type and pattern: knowledge of CAM, number of CAM user, current use, initiation of CAM use, type of CAM use, satisfaction/dissatisfaction related to its use, reason for use, total number of CAM modalities used, duration of disease in relation to CAM, and side effects. Patients were also asked about the source of their CAM awareness, who advised use of CAM and whether they informed their doctor regarding CAM usage.

Statistical Analysis

Analysis was carried out with the help of computer software SPSS Version 15 for windows. The data were expressed in *n* (%).

Result

Majority of patients were females (85%), above 40 years (87%) of age, from low income group (80%) and were from rural background (80%). In most of the patients ESR was raised (96%) and were RF positive (88%) (Table 1).

The study of pattern of CAM use in these patients revealed that (60%) patients were CAM users and 45% of them were on multiple CAM modalities. Females were predominantly CAM users (85%). Persistent pain in spite of anti-rheumatoid drugs was the main reason for adopting CAM modalities (51.66%) in which ayurveda (35%) was the main CAM modality used. Patients with more than 1 year duration of disease (81.66%) were more prone to use CAM. 61% patients reported relief with CAM (Table 2).

Discussion

CAM referred to all those health-related practices that were not based on or not prescribed by a medical practitioners affiliated to allopathic system of medicine and is more prevalent in chronic ailments as patients usually seek remedy from other complementary medicines. Numbers of studies have evaluated CAM in rheumatology OPD but the results are equivocal. Therefore, in this study the CAM practices used by rheumatology patients were evaluated to add clarity to the CAM issues.

In this study, 100 patients reporting to medical OPD with rheumatoid arthritis (RA) were assessed. The demographic profile of RA patients revealed that females (85%) were more affected, similar to other studies,[8,11–14] most of the patients (88%) were above 40 years of age[5,11] and had a rural background (80%). In our study, 74% females were housewives identical to another investigation where 79% were housewives.[5]

Daily routine was affected by the disease such as climbing stairs, squatting, washing clothes, etc. in 53% RA patients. Similar finding was also seen by Jamshidi et al.

In this study, 60% patients of RA were CAM users. Number of studies too have shown that CAM is very prevalent.[5,6,15–17] 45% patients had taken up CAM after receiving anti-rheumatoid therapy because of no relief of pain with anti-rheumatoid drugs.[5] It is commonly held that patients choose to use CAM if they are dissatisfied with conventional treatments and consider it to be ineffective and that modern medicine has no cure for RA similar to observations made by previous studies.[16,18]

In our study higher cost was the second most important reason for starting CAM which is in concurrence to number of previous studies.[8,12,19] Cost is an important consideration in the management of RA or other chronic ailments. According to a study done in Mumbai, the cost of drugs in RA such as antisecretory agents, bisphosphonates, and calcium supplements increase the total cost of RA therapy.[19]

Table 1: Sociodemographic profile and serological status of rheumatoid arthritis patients

Parameters	No. of patients *N* (%)
Sex	
Females	85(85%)
Males	15(15%)
Residence	
Rural	80(80%)
Urban	20(20%)
Age (years)	
Above 40	87(87%)
Below 40	13(13%)
Occupation	
Females	
Non-working	74(74%)
Working	11(11%)
Male	
Non-working	06(06%)
Working	09(09%)
Religion	
Hindus	60(60%)
Muslims	38(38%)
Others	2(2%)
Marital status	
Married	85(85%)
Unmarried	15(15%)
Education	
Educated	25(25%)
Uneducated	75(75%)
Socioeconomic status	
Low income	80(80%)
High income	20(20%)
Lifestyle	
Active life	38(38%)
Sedentary life	62(62%)
Daily routine affected by disease	
Yes	53(53%)
No	47(47%)
Addiction	
Smokers	10(10%)
Alcoholics	5(5%)
Diet	
Vegetarian	30(30%)
Non-vegetarian	70(70%)
Serological status	
ESR	
Raised	96(96%)
Not raised	04(4%)
RF	
Positive	88(88%)
Negative	12(12%)

Poly-pharmacy was also a factor seen in our study for patients taking up CAM. This is similar to the finding made by Dahiya et al. who also observed that there was an increase in number of drug use in patients of RA. The author correlated the increased use of drugs with increased cost of prescription.[12,20]

Our study results showed a significant correlation between CAM use and duration of disease. CAM use was seen more in patients (81.66%) with a longer duration of disease of more than 1 year, which is in concurrence to the observations made by other researchers.[5,17,21] In contrast to our finding, other researcher showed no significant difference between CAM use and disease duration.[8]

More than half of the patients using CAM were advised by their relatives (58.33%) followed by neighbors (16.66%) to try the alternative treatment modality. Similar findings were also observed by other workers.[5,6,15,21,22]

In this study, females (83.3%) were more CAM users because women have more RA-related anxiety and stress than men.[8] Number of studies have also shown females to be more common users of CAM which is similar to our current observations.[23,24]

Ayurveda was the most common type of CAM used followed by spiritual healing (20%), massage therapy, and yoga (16.66%) in this study, and was also reported to be commonly used by patients in other studies.[4,5,6,9,16,17,21] Ayurveda being commonly accepted therapy in rural India because of its easy availability, low cost might have contributed to its high usage. Ayurvedic treatment has a potential to be used for the treatment of rheumatoid arthritis.[7] Massage therapist followed by spiritual healers were the main CAM providers as per this study.[8] This is easily explained because of their easy accessibility and faith in them by the rural population, as our study was mainly constituted by rural background.

Perception regarding control of pain and lack of side effects were the main reasons for use of CAM as observed by other authors, where more patients perceived it to be more effective than conventional therapy and that adverse reactions are rare with CAM.[3,5,6,16,20,21] More than one type of CAM modality was used by (45%) patients which is similar to other findings.[6,16,17]

In this study, 80% patients did not reveal to the attending physician about use of CAM as majority of them hesitated in communicating because of fear of disapproval while (20%) revealed to the physician regarding their CAM use. A stance of outright rejection adopted by many physicians often results in patients withholding all information about CAM use from the treating physician.[5,6,16,21,25]

The outcome of this study revealed that majority of patients (61.66%) were relieved from pain and use of CAM proved to be beneficial in majority of patients. This finding was similar to a study conducted in Netherlands which showed that CAM users had less RA-related complaints and suggested that it might have psychological benefits.[26] Our study showed that (16.66%) patient did not get relief from pain and (13.33%) found CAM to be ineffective.[12]

Table 2: Pattern of CAM in rheumatoid arthritis patients

Parameter	*n* (%)
Knowledge or awareness about CAM	
Present	75(75%)
Absent	25(25%)
Use of CAM	
Users	60(60%)
Non-users	40(40%)
Gender of CAM users	
Males	09(15%)
Females	51(85%)
Initiation CAM use	
Before using anti-rheumatoid treatment	15(25%)
After using anti-rheumatoid treatment	45(75%)
Duration of disease in relation to CAM use	
<1 year	11(18.33%)
>1year	49(81.66%)
Reasons for starting CAM	
No relief from pain with anti-rheumatoid drugs	31(51.66%)
Cost of drugs	14(23.33%)
Polypharmacy	09(15%)
CAM much cheaper	06(10%)
Type of CAM used	
Ayurveda	21(35%)
Spiritual	12(20%)
Massage therapy	10(16.66%)
Yoga	10(16.66%)
Home-made oil	05(8.33%)
Physiotherapy	02(3.33%)
Source of information regarding CAM use	
Relatives	35(58.33%)
Neighbors	15(25%)
Friends	05(8.33%)
Media	05(8.33%)
CAM provider	
Self	36(60%)
Spirtualist healer	12(20%)
Massage therapist	10(16.66%)
Physiotherapist	02(3.33%)
Current status of CAM use	
Continuing	55(91.66%)
Discontinued	05(8.33%)
Reason for discontinuation	
Lack of benefit	03(5%)
Inavailability of resources	02(0.33%)
Number of patients using multiple CAM modality	27(45%)
CAM revealers	12(20%)
To ensure proper relief	09(75%)
Physician enquired	03(25%)
CAM non-revealers	48 (80%)
Hesitate to communicate	29(60.41%)
Fear of disapproval by the physician	13(27.08%)
Didn't find necessary to tell physician	08(16.66%)
Outcome of CAM use	
Pain relief	37(61.66%)
No pain relief	10(16.66%)
Ineffective	08(13.33%)
Adverse drug reaction	05(8.33%)

Conclusion

This study has clearly demonstrated that CAM use is high among patients of RA. Females are more prone to the usage of CAM and the prevalence of CAM is seen more in patients with longer duration of disease.

Majority of patients used CAM after being treated with anti-rheumatoid drugs and lack of control of pain and perception regarding safety with these drugs was the main reason for CAM use. Therefore, the outcome of the study emphasises that the attending clinician should be aware of these therapies as some oral medications used in CAM can be harmful as they may contain heavy metals or corticosteroids.

References

1. Ernst E. Prevalence of use of complementary/alternative medicine – a systematic review. Bull World Health Organ. 2000;78(2):252–7.
2. Wong WH, Litwic AE, Dennison EM. Complementary medicine use in rheumatology: a review. World J Rheumatol. 2015;5(3):142–7.
3. Roy V, Gupta M, Ghosh RK. Perception, attitude and usage of complementary and alternative medicine among doctors and patients in a tertiary care hospital in India. Indian J Pharmacol. 2015;47:137–42.
4. Rao JK, Mihaliak K, Kroenke K, Bradley J, Tierney WM, Weinberger M. Use of complementary therapies for arthritis among patients of rheumatologists. Ann Intern Med. 1999;131:409–16.
5. Zaman T, Agarwal S, Handa R. Complementary and alternative medicine use in rheumatoid arthritis: an audit of patients visiting a tertiary care centre. Natl Med J India. 2007;20(5):236–9.
6. Sukitawut W, Wichainun R, Kaitanon N, Louthrenoo W. Use of complementary and alternative medicine in patients with rheumatoid arthritis. Chiang Mai Med Bull. 2003;42(3):105–11.
7. Kumar G, Srivastava A, Sharma SK, Rao TD, Gupta YK. Efficacy & safety evaluation of Ayurvedic treatment (Ashwagandha powder & Sidh Makardhwaj) in rheumatoid arthritis patients: a pilot prospective study. Indian J Med Res. 2015;141:100–6.
8. Tamhane A, McGwin G, Redden DT, Hughes LB, Brown EE, Westfall AO, et al. Complementary and alternative medicine use in African Americans with rheumatoid arthritis. Arthritis Care Res (Hoboken). 2014;66(2):180–9.
9. Callahan LF, Wiley-Exley EK, Mielenz TJ, Brady TJ, Xiao C, Currey SS, et al. Use of complementary and alternative medicine among patients with arthritis. Prev Chronic Dis. 2009;6(2):A44.
10. Walsmith J, Roubenoff R. Cachexia in rheumatoid arthritis. Int J Cardiol. 2002;85(1):89–99.
11. Jamshidi AR, Banihashemi AT, Roknsharifi S, Akhlaghi M, Salimzadeh A, Davatchi F. Estimating the prevalence and disease

characteristics of rheumatoid arthritis in Tehran: a WHO-ILAR COPCORD Study (from Iran COPCORD study, Urban Study stage 1). Med J Islam Repub Iran. 2014;28:93.
12. Dahiya A, Kalra BS, Saini A, Tekur U. Prescription pattern in patients with rheumatoid arthritis in a teaching tertiary care hospital. MAMC J Med Sci. 2016;2:33–7.
13. Mittal N, Mittal R, Sharma A, Jose V, Wanchu A, Singh S. Treatment failure with disease modifying antirheumatic drugs in rheumatoid arthritis patients. Singapore Med J. 2012;53:532–6.
14. Shini VK, Aboobacker S, Pahuja S, Revikumar KG, Bhasi R. Pharmacoeconomic study of DMARDs in the management of rheumatoid arthritis. Int J Pharm Sci Rev Res. 2010;5:148–54.
15. Unsal A, Gozum S. Use of complementary and alternative medicine by patients with arthritis. J Clin Nurs. 2010;19:1129–38.
16. Chandrashekara S, Anilkumar T, Jamuna S. Complementary and alternative drug therapy in arthritis. J Assoc Physicians India. 2002;50:225–7.
17. Efthimiou P, Kukar M, MacKenzie CR. Complementary and alternative medicine in rheumatoid arthritis: no longer the last resort! HSS J 2010;6(1):108–11.
18. Sutherland LR, Verhoef MJ. Why do patients seek a second opinion or alternative medicine? J Clin Gastroenterol. 1994;19(3):194–7.
19. Gawde S, Shetty Y, Merchant S, Kulkarni U. Drug utililization pattern and cost analysis in rheumatoid arthritis patients: a cross sectional study in a tertiary care hospital, Mumbai. Br J Pharm Resp. 2013;3:37–45.
20. Richmond SJ. Magnet therapy for the relief of pain and inflammation in rheumatoid arthritis (CAMBRA): a randomised placebo-controlled crossover trial. Trials. 2008;9:53.
21. Jadhav MP, Jadhav PM, Shelke P, Sharma Y, Nadkar M. Assessment of use of complementary alternative medicine and its impact on quality of life in the patients attending rheumatology clinic, in a tertiary care centre in India. Indian J Med Sci. 2011; 65:50–7.
22. Breuer GS, Orbach H, Elkayam O, Berkun Y, Paran D, Mates M, et al. Use of complementary and alternative medicine among patients attending rheumatology clinics in Israel. Isr Med Assoc J. 2006;8:184–7.
23. Quandt S, Chen H, Grzywacz J, Bell R, Lang W, Arcury T. Use of complementary and alternative medicine by persons with arthritis: results of the National Health Interview Survey. Arthritis Rheum. 2005;53(5):748–55.
24. Herman C, Allen P, Hunt W, Prasad A, Brady T. Use of complementary and alternative medicine among primary care clinic patients with arthritis Prev Chronic Dis 2004 12.
25. Robinson A, McGrail MR. Disclosure of CAM use to medical practitioners: a review of qualitative and quantitative studies. Complement Ther Med. 2004;12:90–8.
26. Jacobs JWG, Kraaimaat FW, Bijilsma JW. Why do patients with rheumatoid arthritis use alternative treatments? Clin Rheumatol. 2001;20:192–6.

How to cite this article: Sadiq S, Kaur S, Khajuria V, Gupta S, Sharma A. Complementary and alternative medicine use in medical OPD patients of rheumatoid arthritis in a tertiary care hospital. Natl J Physiol Pharm Pharmacol 2016;6:305–309

Source of Support: Nil, **Conflict of Interest:** None declared.