

Traditional Medicine and Food Supplements in Rheumatic Diseases

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Summary

This was a prospective survey using a standard questionnaire to determine the prevalence of use of oral traditional medicine and food supplements among patients with rheumatic diseases. Among the 141 patients surveyed, we found that 69% of the patients were consuming food supplements, 35% were using traditional medicine and 45% had used traditional medicine at some time or other. Females were more likely to use food supplements ($P<0.0017$), especially among those with higher education ($p<0.036$). There was no statistical difference between those who had ever consumed compared to those who never used traditional medicines. The Chinese were more likely than others to be using traditional medicine ($p<0.007$). Vitamin C and B were the most commonly used food supplements. More than two thirds of the patients obtained their traditional medicine from non-medical personnel. More than half of them used 2 or more types of traditional medicine for more than two months. Spending on traditional medicine was noted to be modest with 73% spending less than one hundred ringgit a month for their traditional treatment.

Doctors need to be aware of the possible interactions between these 'self-medications' and the conventionally prescribed medication.

Key Words: Alternative medicine, Traditional medicine, Food supplements, Rheumatic diseases

Introduction

Traditional medicine and food supplements are widely consumed in the local community. Traditional medicine here is defined as the sum total of all knowledge and practices, whether explicable or not, used in the diagnosis,

prevention and elimination of physical, mental or social imbalance and relying exclusively on practised experience and observation handed down from generation to generation. Traditional medicine practice was believed to account for more than 50% of our local practice more than 40 years ago¹. In the western world where

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mainstream medicine is the main source of health care, there has also been a rising trend of practice in alternative medicine. In 1997, a follow-up survey in the United States showed that the use of at least 1 of 16 alternative therapies during the previous year increased from 33.8% in 1990 to 42.1% in 1997². A high prevalence of the use of alternative medicine has been reported among patients suffering from chronic diseases such as arthritis^{3,4}. In fact, herbal therapies have always been regarded as effective and ancient medical remedies to treat arthritis. A recent study conducted in Mexico showed that 51% of 250 study subjects used herbal remedies to treat their rheumatic conditions and 63% reported that the treatment was effective⁵. Glucosamine, one of the recommended oral therapies to treat osteoarthritis is in fact a food supplement used in the European community many years ago before its evidence of benefit became recognised by mainstream medicine. Being a country of diverse ethnicity and cultures, traditional medicine and food supplements alone or as complementary therapy to western treatment are used commonly to treat various ailments including rheumatic diseases. However, there is no local data regarding the extent of the practice, and the socio-economic factors which determine their use. This study was undertaken to determine the prevalence of the use of oral traditional medicine and food supplements among patients with rheumatic diseases. The cost of these therapies and factors that may influence the use of these treatment modalities such as demographic data, were also studied.

Materials and Methods

A 2-week prospective survey was carried out in January 2001 using a standard questionnaire (Appendix 1) in three languages (English, Bahasa Malaysia and Mandarin). The survey was conducted in 3 rheumatology clinics in the Klang Valley: University Malaya Medical Centre, Subang Jaya Medical Centre and Sunway Medical Centre.

Patients with any form of rheumatological disease were invited to participate in an unselected consecutive manner. The questionnaire was administered in the language the patient was most proficient in. The demographic data of each patient was recorded. The level of education was graded as primary, secondary, tertiary or no formal education. The level of monthly income was circled privately by the patients at the end of the survey and was recorded as monthly income of less than RM500, RM501-1000, RM1001-3000 or more than RM3000. Diagnoses were recorded by the rheumatologist.

Use of food supplements and oral traditional medicine at the time of interview and previously (more than one year ago) were recorded. If they were using or ever had used oral traditional medicine, more specific questions regarding source, type, form, duration of use, as well as the expenses per month were asked. We did not ask about other non-oral traditional medicine or other types of alternative therapies.

Data were analysed by SPSS for Windows version 9.01 (SPSS Inc, Chicago, IL). Multiple logistic regression was used to analyse the independent factors that may influence the use of food supplements and oral traditional medicine among the rheumatic patients. A *p* value of < 0.05 was taken as statistically significant.

Results

A total of 141 patients were studied. The mean age of the patients was 48.9 years $\pm$ 15. The demographic data is summarised in Table I.

Ninety-seven (69%) patients were consuming food supplements. Vitamin C and B were the most commonly used products. Females were more likely to consume food supplements (*p*<0.002) (Fig 1); especially among those with secondary and tertiary education (*p*< 0.036) (Fig. 2).

Table 1: Demographic data of the studied subjects

	Number (N=141)	%
Sex		
Male	34	
Female	107	
Race		
Chinese	61	43
Malay	31	23
Indian	44	31
Other	4	3
Educational level		
Primary	70	50
Secondary	28	20
Tertiary	33	23
No formal education	10	7
Monthly income		
<RM500	37	26
RM500-1000	41	29
RM1000-3000	47	33
>RM3000	16	12
Duration of disease		
< 1 year	17	12
1-5 year	54	38
5-10 year	27	19
>10 year	43	31
Diagnosis		
Rheumatoid arthritis	77	54
Osteoarthritis	10	7
Gout	4	3
Connective tissue disease	26	18
Unknown*	24	17

*Diagnosis was not recorded

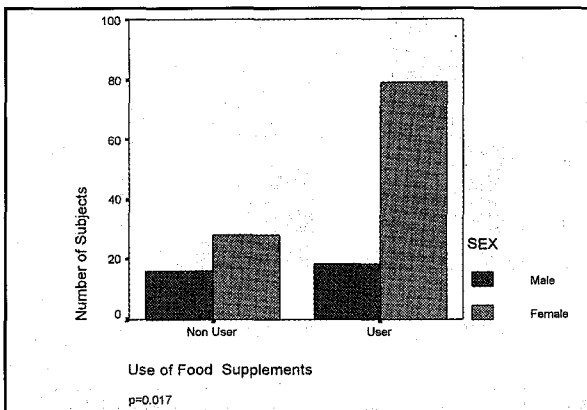
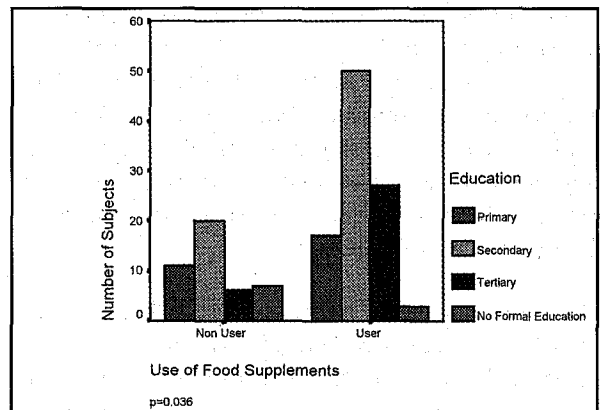
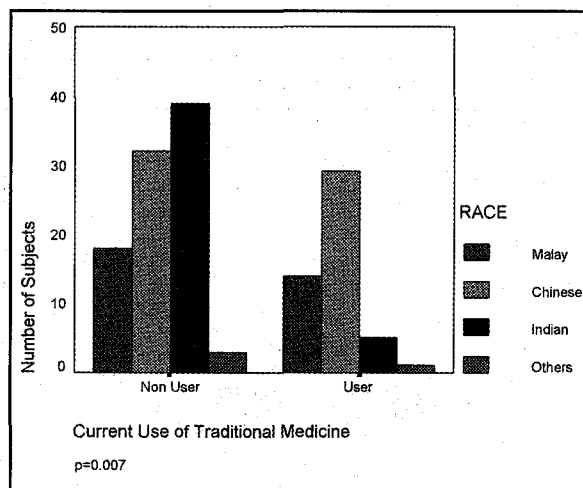
**Fig. 1: Use of Food Supplements and Sex****Fig. 2: Use of Food Supplements and Educational Status**

Table II: Source, expenditure, types, forms and duration of use of oral traditional medicine among patients using or who have used oral traditional medicine

	No	%
Source:		
Friends	33	53
Newspaper advertisement	9	14
Direct sales	7	11
Sinseh/bomoh	14	22
Expenditure/month		
<RM50	32	51
RM50-100	14	22
RM100-500	13	21
>RM500	4	6
Type of medicine		
one type	23	37
two type	20	32
three type	4	6
>three types	16	25
Forms of medicine		
Powder	13	20.5
Pill	13	20.5
Capsule	15	24
Other	22	35
Duration of use		
<one month	9	6
1-2 month	22	35
>2 months	32	51

Sixty-three (45%) patients admitted that they had used oral traditional medicine. There were no significant differences in sex, race, age group, education level, monthly income and duration of disease between those who had used and those had never used traditional medicine. The relationship significance between the diagnosis and the use of oral traditional medicine and food supplements was not analysed due to the high percentage of cases with no diagnosis recorded by the rheumatologists.

Forty-nine (35%) patients were using oral traditional medicine. Multiple logistic regression showed that Chinese race was the most significant factor in determining use of oral traditional medicine ($p < 0.07$) (Fig 3).

**Fig. 3: Current Use of Traditional Medicine and Race**

Further analysis of the source, expenditure, type, form and duration of use of oral traditional medicine are summarised in Table II.

Reasons for using traditional medicine for rheumatic diseases were as follows: 63% of patients responded that they provided good analgesia and 84% said that traditional medicine had no adverse effects. Fifty one percent of patients used oral traditional medicine before seeing their doctors and 57% mixed both western and traditional medicines.

Discussion

The use of oral traditional medicine and food supplements is not uncommon among local patients with rheumatic diseases. The prevalence rate of 35% of oral traditional medicine users is lower than previously reported in other studies on alternative medicine^{3,4}. The likely reason for this is that other studies included other alternative therapies such as acupuncture, homeopathy, reflexology and spiritual intervention such as prayer, meditation and self-relaxation therapy.

Females were more likely to consume food supplements especially among those with secondary and tertiary education. This is possibly due to an increased awareness of available options from advertisements in various health magazines and newspapers although there is no data to support the idea that dietary supplements and megavitamins can improve arthritis⁶.

Similarly, the high prevalence of the use of oral traditional medicine among the Chinese community may be due to unregulated advertising on the efficacy and lack of adverse effects of the various Chinese traditional herbal medicines in the Chinese media.

It is alarming and worrying to know that more than two thirds of patients actually obtained their

treatment from non-medical personnel such as direct sales representatives, friends or advertisements. Herbal preparations have been shown to contain contaminants such as lead and steroids⁷. In a recent study conducted by the University of Malaya Pharmacology Department on adulterants among 198 traditional preparations sold in Malaysia, 45 samples (22.7%) were found to be adulterated with various additives including steroids, glibenclamide and chlorpheniramine⁸. As adulterated traditional medicine is a rising concern, the treating physician should be aware of the use of traditional medicine with all its potential drug interaction and adverse effects. Poly-pharmacy was also common in this cohort of patients with more than half of them using two or more types of traditional medicine at any one time, although spending on this treatment was modest.

In conclusion, the use of alternative medicine such as oral traditional medicine and food supplements is common among patients with rheumatic diseases. Fifty-one percent of patients used these therapies before consulting a doctor and more than half used both traditional and western medicine together. The treating rheumatologist/physician should be aware of the above practice and be able to advise patients on the potential adverse effect with traditional medicine. Some herbal medicine may cause toxic hepatitis,⁹ such as germander, chaparral, skullcap, valerian, comfrey and the traditional Chinese herbal medicine jin bu huan. Methotrexate, one of the gold standard therapies for rheumatoid arthritis may give rise to hepatitis as well, and the use of an additional herbal treatment may confuse the issue if hepatic toxicity occurs. Therefore, self-directed alternative therapy such as oral traditional medicine should be explored in an open atmosphere by the treating rheumatologist/physician in order to encourage more forthcoming information from patients and enable appropriate advice.

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Appendix 1

Centre No.....

Complementary Medicine in Arthritic Diseases

Name (initials)..... Age:..... Sex: M/F

Race: M/C/I/Others

Education status: primary/secondary/tertiary/no formal education

Income: ☐ RM500/month ☐ RM500-1000/month ☐ RM3000-5000/month
☐ RM>5000/month

Diagnosis:
(Physician to fill)

1. How long have you had the 'Rheumatic' illness?
- ☐ < 1 year
 - ☐ 1-5 years
 - ☐ 5-10 years
 - ☐ >10 years

2. In the last year, have you taken any food supplements?
- ☐ Yes
 - ☐ No
- If yes, can you list them?

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.....
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- 3 Have you ever taken traditional medication by mouth?
- ☐ Yes
 - ☐ No

- 4 Have you taken traditional medication by mouth in the last year?
- ☐ Yes
 - ☐ No

If you have answered "yes" to Question 3 or/and 4, please answer the following.

ORIGINAL ARTICLE

5. How did you know about this traditional medicine?
- ☐ Recommended by friends
 - ☐ Recommended by sinseh
 - ☐ From newspaper advertisement
 - ☐ Direct sales
6. What did you spend on food supplements and/or traditional medicine in the last 2 months?
- ☐ < RM50
 - ☐ RM 50-100
 - ☐ RM 100-500
 - ☐ >RM 500
7. In what form was the traditional medication?
(tick one or more)
- ☐ Powder
 - ☐ Pill
 - ☐ Capsules
 - ☐ Other
8. How many types of traditional medications are you taking?
- ☐ 1 type
 - ☐ 2 types
 - ☐ 3 types
 - ☐ > than 3 types
9. How long did you take the traditional medication?
- ☐ < 1 month
 - ☐ 1-12 months
 - ☐ > 12 months
10. Did you take the traditional medication before seeing a medical doctor?
- ☐ Yes
 - ☐ No
11. Did you take the traditional medication along with Western medication?
- ☐ Yes
 - ☐ No
12. Did the traditional medication help your pain?
- ☐ Yes
 - ☐ No
13. Did you feel the traditional medication gave you any side effects?
- ☐ Yes
 - ☐ No

14. Are you still taking this medication?

☐ Yes

Why?

☐ Western medication did not help you

☐ Traditional medication is more effective

☐ Traditional medication is less side effect

☐ Combination of Western and traditional medication perhaps are more effective

☐ Don't know

☐ No

☐ If no, why did you stop?

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