

Knowledge and Practice of Complementary Medicine Amongst Public Primary Care Clinic Doctors in Kinta District, Perak

I A Ismail, MBChB*, S C Chan, FRACGP**

*Hospital Ipoh, Perak, **Department of Primary Care & Public Health, Perak College of Medicine, 3 Jalan Greentown, 30450 Ipoh, Perak

Summary

The knowledge and practice of doctors (n=40) towards complementary medicine (CM) in 16 health clinics in the Kinta District were assessed by questionnaire. Thirty-four (85%) responded. More than half felt that acupuncture (73.5%), homeopathy (59%) and herbal medicine (59%) were occasionally harmful. Forty-four percent felt manipulative therapy was frequently harmful. Relaxation technique (79%) and nutritional therapy (44%) were considered most frequently useful. 59% used some form of CM. There were no significant differences found in usage rates by gender, age group and exposure to CM during undergraduate training. Sixty-seven percent had encouraged patients to seek CM. Seventy-three percent perceived an increasing demand for CM. Eighty-eight percent were in favour of a hospital based CM referral center. Only 6% were trained in CM.

Key Words: Knowledge and practice of complementary medicine, Primary care clinic doctors

Introduction

Complementary medicine (CM) refers to a group of therapeutic and diagnostic disciplines that exist largely outside the institutions where conventional health care is taught and provided. CM is an increasing feature of healthcare practice¹. Studies suggest that between 30% and 50% of the adult population in industrialized nations like America, Europe and Australia use some form of CM to prevent or treat a variety of health related problems^{2,3,4,5,6}.

Realizing the importance of recognizing CM, Malaysia's health minister announced in November 2000 the establishment of a council comprising 5 umbrella organizations representing Malay, Chinese and Indian traditional health systems, complementary therapies and homeopathy^{7,8}.

There is evidence that doctors are responding to the increasing awareness in several ways, from being enthusiastic and interested to being mystified and critical^{9,10}. There is also evidence that the increasing public use of CM is paralleled by acceptance among family doctors¹¹.

Some studies found that the practice of CM in general is greater among younger physicians but other studies found no difference in age^{3,12,13,14}. The practice of CM was more common among male physicians in 2 surveys, one other study found belief in CM greater among female physicians but 6 studies found no difference in practice and belief by gender^{2,3,12,13,14}.

Meta analysis published in 1995 by Ernst et al⁴ of 12 international surveys which assessed whether

This article was accepted: 8 June 2003

Corresponding Author: Chan Sook Ching, Department of Primary Care & Public Health, Perak College of Medicine, 3 Jalan Greentown, 30450 Ipoh, Perak

physicians believed that CM is useful and/or effective found that, on average, physicians judged CM therapies to be moderately effective.

Physicians must learn about CM practice and inquire about their patient's use of these practices¹⁵. Approximately 7 of 10 patients using CM for a serious health problem do not tell their physician that they are using unconventional therapy¹⁶. More than 50% of practicing physicians are willing to refer for CM practices such as biofeedback, hypnosis, acupuncture, diet and lifestyle therapies. However, few are willing to refer for homeopathy or spiritual healing or for herbal treatments and mega vitamins^{3,15}.

The knowledge of the doctors in the light of the growing usage and awareness of CM by the public is important as this will enable the doctors to gain their patients' trust and increase patient-doctor understanding. It is of benefit to the patient and the doctor if the doctors could provide complementary therapies through their practice, provided these are evidence based and the doctors are well trained.

Objective of the Study

The objective was to assess the knowledge and practice of Kinta District public primary care clinics' doctors towards a range of CM as listed in Appendix 1 (modified from the ABC of Complementary Medicine by the BMJ¹⁷ and a study done in Australia¹¹).

Materials and Methods

A list of doctors working in the public primary care clinics in the Kinta District was obtained from the Kinta Health Office, Batu Gajah. Doctors who were working in the health office (i.e. not seeing patients) were excluded from the study.

A self administered questionnaire was devised and pretested on the Batu Gajah Hospital's Accident and Emergency doctors. The questionnaire was then given out to all the 40 doctors working in the 16 public primary care clinics in the Kinta District.

A definition of the different categories of CM assessed (see Appendix 1) was given together with the questionnaire. The questionnaires were given out and collected by hand. They were checked and any problems or unanswered questions were remedied and

filled in at time of collection. Questionnaires given out but not returned by the end of the second week were excluded.

The main parameters assessed were doctors' knowledge based on opinion on the usefulness and harmfulness of CM therapies studied, the difference in the usage of CM among younger and older physicians and according to age, interest in training and opinions on whether CM should be made available for referral in the government hospitals.

The practice of CM among the doctors in the clinical setting was not assessed as the study group were Ministry of Health doctors working with fixed budget and practice guidelines.

Results

Six doctors failed to return the questionnaires by the end of the second week and were excluded from the study, leaving 34 (85% response rate). Among the 34, there were 23 female doctors and 11 males with a mean age of 33 (minimum age was 26 years old and maximum age 51 years). Fifty two percent were Malay, 24% Chinese and 24% Indian.

Out of the 34 doctors included in the study, 65% were from local universities and 35% studied overseas which included United Kingdom, Ireland, India and Japan. Thirty five percent of the doctors indicated that they were exposed/taught about complementary therapies during their undergraduate studies.

The majority of the doctors (73%) perceived the demand by patients for complementary therapies as increasing in the last 1 year. Sixty one percent claimed that they specifically asked patients if they were using any form of complementary therapies when they came for consultations. However, 2 doctors commented that they would only ask the specific questions if the patient's history suggested usage of complementary therapies.

Doctors' knowledge on the harmfulness of various complementary therapies are detailed in Table I. All the doctors thought that relaxation technique was seldom harmful. They did, however comment that their knowledge was not sufficient enough to give evidence based opinions on the harmfulness of complementary therapies studied. More than 50% thought that acupuncture, homeopathy and herbal medicine were

occasionally harmful. A few commented that the harmfulness also depended on the complementary therapist.

The opinions of the doctors on the usefulness of CM are listed in Table II. Most of the doctors thought that CM were either occasionally or frequently useful. However in manipulative therapy although 53% felt it was occasionally helpful, another 41% thought that it was seldom useful.

Forty nine percent of the doctors used some form of CM. There was no significant difference found in usage rates by gender (male and female) or age group (between younger and older doctors). There was also no significant difference according to undergraduate training and exposure.

The usage of CM among the doctors according to specific type of therapies are detailed in Table III. The low percentage of doctors using acupuncture and manipulative therapy might be due to the scarce availability of these therapies known to the doctors. The highest usage was for nutritional therapies (38%) followed by relaxation technique (29%).

For the past 1 year, 82% of the doctors had patients enquiring or asking advice on complementary therapies. The percentage of doctors with patients enquiring or asking advice on various complementary therapies for the past 1 year is shown in Table IV.

More than half (67%) of the doctors involved in the study had given at least one consultation encouraging patients to seek CM (see Table V). Only 2% had given consultation encouraging patients to seek herbal therapy. This could be related to their opinion on the harmfulness of herbal medicine as 79.5% of all the doctors involved thought that herbal medicine was occasionally to frequently harmful (refer Table I).

Training in CM and interest in training of complementary therapies among the doctors are listed in Table VI. Training include self training such reading books on CM, attending seminars or symposium and proper classes conducted by complementary therapists. Most of the doctors were not trained in CM. However, up to 17% showed interest in training in specific forms of CM.

Eighty eight percent of the doctors were in favour of having some form of complementary therapies available in the government hospitals to refer patients to. The most popular complementary therapies suggested were relaxation technique (56%), nutritional therapy (38%), massage therapy (29%), herbal medicine (18%), acupuncture (9%) and manipulative therapy (6%).

The doctors also commented that if the complementary therapies were made available in government hospitals, they should be informed of their existence. The complementary therapies' efficacy, safety, effectiveness and correct usage backed by scientific based research should be given to the doctors.

Table I: Doctors' knowledge on the harmfulness of complementary therapies (based on opinion)

	Harmful Frequently	Occasionally	Seldom
Relaxation technique	0 (0%)	0 (0%)	34 (100%)
Acupuncture	1 (3%)	25 (73.5%)	8 (23.5%)
Manipulative therapy	15 (44%)	16 (47%)	3 (9%)
Massage therapy	1 (3%)	10 (29%)	23 (68%)
Herbal medicine	7 (20.5%)	20 (59%)	7 (20.5%)
Nutritional therapy	1 (3%)	8 (23.5%)	25 (73.5%)
Homeopathy	2 (6%)	20 (59%)	12 (35%)

Table II: Opinions of the doctors on the usefulness of complementary therapies

	Harmful Frequently	Occasionally	Seldom
1. Relaxation technique	26 (76%)	7 (21%)	1 (3%)
2. Acupuncture	2 (6%)	22 (65%)	10 (29%)
3. Manipulative therapy	2 (6%)	18 (53%)	14 (41%)
4. Massage therapy	10 (29%)	19 (56%)	5 (15%)
5. Herbal medicine	2 (6%)	22 (65%)	10 (29%)
6. Nutritional therapy	15 (44%)	15 (44%)	4 (12%)
7. Homeopathy	3 (9%)	20 (59%)	11 (32%)

Table III: Usage of CM among the doctors according to specific type of therapies.

	% of users
Relaxation technique	29
Acupuncture	0
Manipulative therapy	0
Massage therapy	21
Herbal medicine	18
Nutritional therapies	38
Homeopathy	6

Table IV: Percentage of doctors with patients enquiring or seeking advice on complementary therapies in the past 1 year

	%
1. Relaxation technique	11
2. Acupuncture	2
3. Manipulative therapy	8
4. Massage therapy	14
5. Herbal medicine	18
6. Nutritional therapies	20
7. Homeopathy	5

Table V: Consultations by the doctors (encouraging patients to seek complementary therapies) for the past 1 year

	%
1. Relaxation technique	12
2. Acupuncture	0
3. Manipulative therapy	0
4. Massage therapy	10
5. Herbal medicine	2
6. Nutritional therapies	13
7. Homeopathy	1

Table VI: Training in and interest in training of complementary therapies among the doctors

	Had training (includes self-taught)	Interest in training
1. Relaxation technique	6	11
2. Acupuncture	0	6
3. Manipulative therapy	0	6
4. Massage therapy	0	8
5. Herbal medicine	2	10
6. Nutritional therapies	5	17
7. Homeopathy	1	3

APPENDIX 1**Range of Complementary Therapies**

1. Relaxation techniques
 - e.g. meditation, hypnosis, prayer, Yoga, Tai Chi, Qigong etc.
2. Acupuncture
 - Stimulation of special points on the body, usually by insertion of fine needles.
3. Manipulative therapy
 - Chiropractic and osteopathy (therapies of the musculoskeletal system)
 - Practitioners work with bones, muscles and connective tissue to treat abnormality of structure and function
 - (Roots = bone setting); includes traditional bone healers/ bomoh patah.
4. Massage therapy
 - e.g. **Therapeutic massage**
 - Manipulation of the soft tissue of whole body areas to bring about generalized improvements in health
 - Reflexology**
 - Massage of the area of foot corresponding to the organ/structure of the body.
 - Aromatherapy**
 - Essential oil added to base massage oil (smell) e.g. lavender to aid sleep
5. Herbal medicine
 - The use of plants for healing purposes, usually in raw form / raw processed e.g. pegaga, tongkat ali, ginseng, Chinese "cooling" herbs (ying) or "stimulating" herbs (yang), external application of herbs
6. Nutritional therapies
 - e.g. nutritional supplements, minerals, honey etc, diet intervention
7. Homeopathy
 - Treatment with diluted portions of homeopathic preparation ; "like should be cured with like"

Discussion

This study provided the first overview on the attitude and practice of complementary medicine amongst the public primary care clinic doctors in the Kinta District, Perak. Even with a response rate of 85%, the small sample of 34 doctors did not allow for extensive statistical analysis. This was a limitation of this study. In future studies, more doctors from other districts / states should be included.

Another limitation of the study was the grouping of CM into 7 major groups. The difficulty in designing research on CM is well recognized as stated in an article by Nahin, Richard L, Stephen E et al in the 20th January edition of the BMJ 2001. They stated that while taking into consideration the multimodality treatment regimens, research design is further confounded by the wide variation in how many forms of CM are practiced¹⁸.

Nutritional and herbal medicine also overlap in which more and more products 'herbal' in origin are now found packaged and sold as 'supplements'. There is even 'complementary diet' or food such as canned herbal drinks and cordials. What about those conventional drugs which were developed from plants? It is worrying that most complementary therapies on sale

in Malaysia lacks evidence and scientific research as randomized controlled trials (Level 1 evidence) are hard to come by.

The findings in the study could well be a stepping stone towards the understanding of the attitude and practice of CM amongst medical professionals in Malaysia. This is, no doubt an important issue in the light of the increasing recognition by the government and popularity amongst the public.

Further research is urgently needed on the knowledge, attitude and practice of doctors working in the private sector as well as on a representative sample of the doctors working with the Ministry of Health in Malaysia. In view of the high percentage of doctors encouraging patients to seek CM (as found in this study), training courses on CM and studies that could provide evidence on the therapies are highly recommended.

Acknowledgements

The authors would like to thank the Director-General of the Ministry of Health for permission to publish this paper and the primary care clinic doctors in Kinta District who participated in this study.

References

1. Zollman C, Vickers A. ABC of Complementary Medicine: What is complementary medicine? *BMJ*. 1999; 319(7211): 693-6.
2. Astin JA, Ariane BA, Kenneth R et al. A review of the incorporation of complementary and alternative medicine by mainstream physicians. *Arch Intern Med*. 1998; 158(21): 2303-10.
3. Astin JA. Why patients use alternative medicine: results of a national study. *JAMA*. 1998; 279: 1548-53.
4. Ernst E, Resch KL, White AR. Complementary Medicine : what physicians think of it : a meta analysis. *Arch Intern Med*. 1995; 155: 2405-8.
5. Himmel W, Schulte M, Kochen MM. Complementary medicine: are patients' expectations being met by their general practitioners? *Br J Gen Pract*. 1993; 43: 232-5.
6. MacLennan AH, Wilson DH, Taylor AW. Prevalence and cost of alternative medicine in Australia. *Lancet*. 1996; 347: 569-3.
7. Bodeker G. Lessons on integration from the developing world's experience [Education and debate], *BMJ*. 2001; 322(7279): 164-7.
8. Straits Times. Kuala Lumpur, Malaysia, Nov. 14, 2000.
9. Owen DK, Lewith G, Stephens CR. Can Doctors respond to patients' increasing interest in complementary and alternative medicine? *BMJ*. 2001; 322(7279): 154-7.

ORIGINAL ARTICLE

10. Wharton R, Lewith G. Complementary Medicine and the general practitioner. *BMJ*. 1986; 292: 1498-500.
11. Marie V, Cohen MM, Kotsirilos V, Farish SJ. Complementary Therapies: have they become accepted in general practice? *Med J Aust*. 2000; 172: 105-9.
12. Verhoef MJ, Sutherland LR. Alternative Medicine and General Practitioners; opinions and behaviour. *Can Fam Physician* 1994; 41: 1005-11.
13. Hadley CM. Complementary medicine and the General Practitioner: A survey of general practitioners in the Wellington area. *N Z Med J*. 1988; 101: 766-8.
14. Marshall RJ, Gee R, Israel M, Neave D. The use of alternative therapies by Auckland general practitioners. *N Z Med J*. 1990; 103: 213-5.
15. Chez RA, Jonas WB, Crawford C. A survey of medical students' opinions about complementary and alternative medicine. *Am J Obstet Gynaecol*. 2001; 185(3): 754-7.
16. Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkin DR, Delbanco TL. Unconventional medicine in the United States: prevalence, costs and patterns of use. *N Eng J M*. 1993; 328: 246-52.
17. Zollman C, Vickers A. *ABC of complementary medicine*. London: BMJ Publishing 2000.
18. Nahin, Richard L, Straus, Stephen E. Research into complementary and alternative medicine: problems and potential. *BMJ*. 2001; 322(7279): 161-4.