

# *Journal of Complementary and Integrative Medicine*

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Volume 2, Issue 1

2005

Article 8

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# Public Attitudes Towards Chinese Medicine in Melbourne, Australia\*

Charlie CL Xue PhD, Clifton Lee BSc, Joanna Karagiannis PhD, Chunguang Li PhD, Angela WH Yang MBA, Lin Zhang MPH, and David F. Story PhD

## Abstract

**Purpose:** To investigate the public attitudes towards Chinese medicine and the impact of the introduction of statutory practitioner registration in Melbourne, Australia. **Method:** A convenience sample of 575 participants (18-45 years of age) from three locations in Melbourne completed a self-administered, 60-question survey in August 2002. **Results:** In the previous 12 months, Chinese medicine had been used by 30.9% of the respondents and 17.3% had visited a Chinese medicine practitioner. For each of eight common conditions listed in the survey, between 61.2% and 92.7% of participants indicated that western medicine was their preferred therapeutic option, rather than Chinese medicine or combination of Western and Chinese medicine. However, substantial proportions of participants preferred Chinese medicine for stomach or internal problems (28.4%), cold/flu (18.8%) and dizziness (17.6%). Although 78.2% were aware that statutory practitioner registration had recently been introduced in the State, only 29.9% indicated that they would only visit a registered practitioner. **Implication:** More stringent surveillance of Chinese medicine service providers and a public education campaign may be necessary to protect against unauthorized Chinese medicine practice.

**KEYWORDS:** Chinese Medicine, Complementary and Alternative Medicine, Attitudes, Melbourne, Australia

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\*This project is partially funded by a Mack Lipkin Broader Horizon Fellowship to Mr. Clifton Lee who was a senior medical student at The Sophie Davis School of Biomedical Education, The City University of New York, USA. Special thanks for the assistance in statistical analysis by Associate Professor Cliff DaCosta and Dr John Reece, RMIT University. We also would like to express our gratitude to Professor Vivian Lin, President of the Chinese Medicine Registration Board of Victoria for her constructive comments during the preparation of this manuscript.

## INTRODUCTION

Over the last decade, there have been dramatic increases in the popularity of complementary and alternative medicine in many western countries, including Australia. A recent study in Australia revealed that in 2000, complementary medicine was utilized by 52.1% of the Australian population with an estimated AU\$ 2.3 billion being spent on complementary medicine services and products, compared to less than AU\$1 billion in 1993 (MacLennan, et al., 1996, 2002). It has been suggested that the increasing popularity of complementary medicine, in general, in Australia is due to enhanced interest in the maintenance of personal health and increasing public confidence in the effectiveness and safety of the alternative therapies (Siahpush, 1999). Consistently, a national study in the US revealed that perceived benefits of alternative therapies were considered as potential determinants of use (Astin, 1998).

Chinese medicine is one of the commonly used forms of complementary medicines. However, the increasing use of Chinese medicine in western countries has been accompanied with concerns about its efficacy (Ito & Shimura, 1986; Lin et al., 1996) and safety (Bensoussan et al., 2000; Ko, 1999), both when used alone and when used in combination with western medical treatments. A recent review on prevalence of complementary medicine concluded that there were a number of shortcomings in most published studies on the usage of, and public attitudes to complementary medicine, which limited the conclusions that could be drawn from these findings (Ernst, 2000). For example, frequently, studies had failed to clearly define the measurement of prevalence of use of specific alternative therapies such as Chinese medicine. It is also likely that more useful and precise data would have been obtained if investigations had focussed on a specific form of complementary medicine, rather than attempting to cover the extremely diverse range of complementary therapies, many of which are poorly defined (Ernst, 2000).

There has been no study to investigate the consumers' attitudes to and rationales of Chinese medicine use in Australia. Thus, a proper understanding of these issues is a necessary prerequisite to developing appropriate educational standards and regulatory systems for Chinese medicine practice. This pilot study was to provide preliminary information for such purposes and to assist in the design of a larger national population-based study that will deal with multiple complementary medicine modalities. The study was considered timely, since the Government of the Australian State of Victoria, had introduced statutory regulation of Chinese medicine practitioners, being the first western government to do so. Thus, some items in the survey were included to assess public awareness of the government initiative and attitudes towards it.

## **METHODOLOGY**

This pilot study was in full compliance with the guidelines of the RMIT Human Research Ethics Committee. In this study, it was not our attention to collect population representative data on the prevalence of Chinese medicine use, but rather to gather exploratory information on public attitudes toward Chinese medicine through a self-administered survey. Participants were recruited on the basis of convenience from three locations in Melbourne (capital city of Victoria, Australia), in August 2002. Survey locations included a predominantly Asian area (Melbourne's Chinatown), and two predominantly Caucasian areas (the City and Bundoora Campuses of RMIT University).

Potential subjects at each of the chosen locations were approached randomly by a researcher (CL) who outlined the nature and purpose of the survey. All participants over 18 years of age were eligible to participate, and there were no quotas of respondent types. Participants were asked to read a brief letter, which provided further details of the study. Those who agreed to participate completed the paper-based survey and placed the completed forms in a collection box at the survey sites. The survey was in English and no interpretation or translation was provided. Participants were given as much time as they needed to complete the survey.

Statistical analyses were performed using descriptive percentage information and Chi square analysis (SPSS for Windows Version 11.0). Unadjusted *p* values of less than 0.05 were accepted as indicating statistical significance. Qualitative analyses were also carried out to explore the rationales concerning Chinese medicine usage, its perceived effectiveness and opinions about the statutory regulation.

## **RESULTS**

### **1. Characteristics of the study population**

A total of 575 participants completed the survey: 32.5% (187) from the City's Chinatown site, 32% (184) from the RMIT University City campus, and 35.5% (204) from the RMIT University Bundoora campus (18 km north from the City centre). Table 1 summarises demographic characteristics of the study population. The basic demographic data were comparable with the 2001 Census of Population and Housing for Victoria, except that there was under representation of the elderly, the less educated and of Australian-born individuals (Australian Bureau of Statistics, 2002).

**Table 1: Demographic data**

Characteristic	Group	%	ABS	Characteristic	Group	%	ABS
Gender	Male	51.9	49.1	Ethnicity	Caucasian	49.5	N/A
	Female	48.1	50.9		Asian	39.8	N/A
					Other	10.7	N/A
Age	18-25	75.5	14.5	Qualification	High School and other	24.6	65.2
	26-35	13.4	20.1		University	46.3	31.3
	36-45	5.1	20.4		Postgraduate	29.1	3.5
	>45	6.0	55.1				
Place of Birth	Australia/ NZ	49.5	71.7	Years in Australia	< 5 years	32.6	12.2
	Asia	37.1	6.0		6-15 years	13.1	24.1
	Europe	6.7	12.8		> 16 years	54.3	63.8
	Other	6.7	9.5				

## 2. Usage of complementary medicine, Chinese medicine, and western medicine

Study participants were asked about their life-time usages and use in the previous 12 months of complementary medicine, Chinese medicine specifically, various modalities of Chinese medicine, such as acupuncture and Chinese herbal medicine, and western medicine.

Slightly over half (53.6%) of the respondents had previously used some form of complementary medicine and somewhat more than one-third had used it in the last 12 months. Well over one third of the respondents had seen a complementary medicine practitioner at least once. The proportion that had specifically used Chinese medicine (48.9%) was only slightly less than the proportion that had used any form of complementary medicine. Similar to complementary medicine, just over one-third had used Chinese medicine in the last 12 months. In respect of specific therapeutic options of Chinese medicine, Chinese herbal home remedies (35.4%), acupuncture (20.7%) and Qi-Gong/Tai Chi (20.2%) were the most commonly used modalities.

The proportion of respondents who had informed their western medical practitioners that they had used complementary medicine was 17.6% and, less than one-sixth (14.5%) of them had been asked by their doctors about their use of complementary medicine. The survey findings suggested that the cost of using complementary medicine was frequently borne by individuals. Thus, although almost two-thirds of survey respondents had private health insurance, a much

smaller proportion (20.6%) indicated that their health insurance covered their expenditure on complementary medicine.

There were some interesting outcomes of cross-section analysis of the survey response data. The use of herbal home remedies was more common amongst females (59.5%) than males (48.1%) ( $p<0.01$ ), and more females (93.1%) than males (88.1%) believed that Chinese medicine could be effective in curing illness ( $p<0.05$ ). Survey participants born in Asia had a higher rate of Chinese medicine usage than those not born in Asia (72.5% and 33.8%, respectively,  $p<0.001$ ). There was a similar finding in respect of visits to Chinese medicine practitioners (Asian-born 41.7%, non-Asian born 24.2%;  $p<0.05$ ).

### **3. Treatment of specific conditions**

The proportions of the respondents that indicated that they would use Chinese medicine, western medicine and both of these forms of health-care to manage some common specific conditions are given in Table 2. Clearly, for each of the conditions surveyed, western medicine was the most frequently used. However, substantial proportions of respondents indicated that they would use Chinese medicine for the treatment of stomach or internal problems (28.4%), cold and flu (18.8%), and dizziness (17.6%). It is also of interest that almost 10% of respondents indicated that they would use Chinese medicine for the treatment of cancer.

For several of the conditions surveyed, cancer, cold/flu and stomach/internal problems, 10% or more of the respondents indicated that they would use both Chinese and western medicine (Table 2).

**Table 2: Use of western medicine, and /or Chinese medicine to treat specific conditions**

Conditions	Western medicine	Chinese medicine	Both
Cold/flu	68.6%	18.8%	12.6%
Dizziness	79.1%	17.6%	3.3%
Eye related problems	92.3%	5.9%	1.8%
Hearing related problems	92.7%	5.8%	1.5%
Cancer	75.7%	9.8%	14.5%
Stomach or internal problems	61.2%	28.4%	10.4%
Broken limb	85.2%	10.7%	4.1%
A general health inspection	81.2%	11.1%	7.7%

#### 4. Factors and perceptions influencing the choice of therapy

Perceptions that may influence the decision to use western medicine, Chinese medicine, and other forms of complementary medicine were also investigated. The findings are summarised in Table 3. Of those surveyed, the most frequent beliefs held by study participants about Western medicine were that it was more accessible (83.0%) and it produced faster relief of symptoms (73.8%). Fewer side effects (61.6%), better long-term cure (42.8%) and affordability (41.2%) were the most frequently held beliefs about Chinese medicine. In regard to other forms of complementary medicine, affordability and fewer side effects were also the most frequently held beliefs nominated by the respondents, although much higher proportions held these beliefs about both Chinese medicine and western medicine.

**Table 3: Perceptions influencing the choice of western medicine, Chinese medicine and other forms of complementary medicine**

Perception	Western medicine	Chinese medicine	Other forms of complementary medicine
More affordable	42.6%	41.2%	16.2%
More accessible	83.0%	10.6%	6.4%
Faster relief of symptoms	73.8%	19.5%	6.7%
Is better for long term cure	49.3%	42.8%	7.9%
Has fewer side effects	28.2%	61.6%	10.2%

#### 5. Opinions about the use and effectiveness of Chinese medicine and about its regulation

Table 4 summarises the study participants' opinions about the use and effectiveness of Chinese medicine and of its regulation by government. Chinese medicine was considered by the majority of the participants to be effective for symptomatic relief (90.8%). Moreover, in excess of three-quarters considered that combination of western and Chinese medicine could be more effective than either alone. Chinese medicine was perceived by the majority of the participants to be beneficial for long-term cure (78.2%).

With regard to regulation, more than two thirds of the participants believed that Chinese medicine should be more strictly regulated and an even greater proportion considered that it should be regulated in the same way as western medicine. As also shown in Table 4, more than 80% of participants considered that Chinese medicine should be covered by health insurance.

**Table 4: Opinions about Chinese medicine use, its effectiveness and regulation**

Questions: Do you believe that:	% Yes
Chinese medicine should be covered by health insurance?	83.8
the use of Chinese medicine has a substantial presence in Australia?	64.4
Chinese medicine can be effective in the relief of symptoms?	90.8
Chinese medicine can be effective for the long-term cure of disease?	78.2
the use of Chinese medicine in conjunction with Western medicine can be more effective than either form of medicine used alone?	79.7
Chinese medicine should be more strictly regulated?	67.7
Chinese medicine should be regulated the same way as Western medicine?	76.3

## 6. Statutory registration of Chinese medicine practitioner

At the time of the survey, statutory regulation of Chinese medicine practice had only been in place in the Australian State of Victoria for 6 months; however, before its introduction the proposed regulation received considerable media coverage. Hence it was of interest to investigate participants' awareness of this Government's initiative and views on such regulation. The findings are summarised in Table 5.

**Table 5: Statutory regulation of Chinese medicine**

Question	% Yes
Do you know that Chinese medicine practitioners have to be registered under the Chinese medicine Registration Board of Victoria from the 1 January 2002 to continue their practice?	78.2
If you are Chinese medicine service users, is your Chinese medicine practitioner a registered practitioner?	58.2
Do you only see registered practitioners for your health needs?	29.9
Do you think that registration of Chinese medicine practitioners gives more confidence to the public in considering Chinese medicine as a healthcare option?	20.9
Do you believe that registration provides a mechanism to protect the public from receiving unqualified service?	18.7
If you have a concern regarding Chinese medicine service, would you contact the Chinese medicine Registration Board of Victoria to express your concern?	37.9
Would you go to see a non-registered Chinese medicine practitioner?	80.8



More than three quarters of the participants were aware of the requirement for practitioner registration in Victoria and more than half of Chinese medicine users indicated that their Chinese medicine practitioner was registered. However, less than a third of respondents indicated that they would only visit a registered practitioner. In confirmation of this attitude, more than 80% of respondents indicated that they would be prepared to see a non-registered practitioner (Table 5).

It was of interest that only approximately one fifth of the participants considered that practitioner registration would enhance public confidence in Chinese medicine or that it would protect the public from unqualified practice. It is also worth noting that only slightly more than one third of respondents would refer any concerns that they had about Chinese medicine services to the statutory Chinese medicine Registration Board of Victoria (Table 5).

## DISCUSSION

Although, amongst the survey participants, western medicine was considered to be much more accessible than Chinese medicine and other forms of complementary medicine, it is generally accepted that the demand for many forms of complementary medicine, including Chinese medicine is currently expanding substantially in western countries, including Australia (Eisenberg et al., 1993; 1998) (MacLennan et al., 1996; 2002). In regard to complementary medicine overall, and to Chinese medicine specifically, substantially higher proportions of respondents in this survey indicated that they were users than the proportions who indicated that they had visited a complementary medicine or Chinese medicine health-care professionals. Thus, it would appear that a considerable number of those using these therapies and /or products were either self-administering or self-medicating.

Unlike findings of a South Australia study (MacLennan et al., 2002), a significantly larger number of respondents in the present study indicated that they had used Chinese medicine (30.9% compared with 18% when herbal medicines, Ginseng and Chinese medicine are combined). In contrast, the overall usage of complementary medicine over the last 12 months was lower (36.6%) than in the South Australia study (52.1%). The difference may represent a regional variation in awareness of Chinese medicine, between Melbourne (capital city of the state of Victoria) and the South Australian population survey (MacLennan et al., 2002). In this regard, Victoria has a much higher proportion of ethnic Chinese than does South Australia. In addition, two public universities in Melbourne offer degree programs in Chinese medicine (at the time of the survey, none in South Australia)

and the government of Victoria has so far been the only state government to introduce statutory regulation of Chinese medicine. It should also be noted that the MacLennan study was part of the 2000 South Australian Health Omnibus Survey (SAHOS), which involved a randomized study population, and thus was probably representative of the South Australian population. However, it should be noted that, in the present pilot study, over one third of Australian-born participants used Chinese medicine therapies. Clearly the current survey sample for this study was not representative of the Melbourne population as a whole, including a disproportionate number of Asians, particularly of Chinese descent. Furthermore, since subjects volunteered for the study, it is likely that they had a particular interest in complementary medicine and/or Chinese medicine. Nevertheless, convenience sampling is commonly used in exploratory research and is appropriate for preliminary pilot studies, such as the present study (StatPac, 2003).

With regard to users of complementary medicine speaking to their medical doctors about their use of complementary medicine, the proportion (17.6%) in this study was significantly lower than the South Australian study (42.8%, MacLennan et al., 2002) and the USA study (38.5%, Eisenberg et al, 1998). It is also important to note that most medical practitioners did not ask their patients whether or not they had used complementary medicine simultaneously. These findings highlight major concerns associated with the growing use of complementary medicine in western societies, in regard both to optimal therapeutic management of patients and the potential for adverse interactions between complementary medicine and western interventions.

Within the sample surveyed in Melbourne, Australia, it indicated that Chinese medicine was most frequently chosen for the treatment of cold and flu, dizziness, and stomach and internal problems. However, lower but substantial proportions of the respondents (approximately 10%) indicated that they used, or would use it to treat cancer and broken limbs and also for general health enhancement. On the other hand, Chinese medicine was used infrequently to treat eye and hearing-related problems. Such findings, which are similar to those of a previous study in Chinatown, New York (Chan & Chang, 1976), may have implications for Chinese medicine practitioner training.

In Australia, within the last decade, several major universities and private educational institutions have introduced comprehensive Chinese medicine practitioner training programs. In addition, there have also been a number of government initiatives in response to the increasing use of complementary medicine therapies. For example, the Australian government has established a unit

within its therapeutic goods regulatory authority to oversee the safety and quality of manufactured complementary medicine and, in 2000, the government of the State of Victoria introduced statutory regulation of Chinese medicine practitioners. Most recently, the Australian government commissioned a comprehensive review of the use of complementary medicine in the health-care system. The findings and recommendations arising from the review are currently being addressed by the government (Therapeutic Goods Administration (TGA), 2003). Clearly, multi-generational experience with traditional medicines such as Chinese medicine is lacking in western societies such as Australia, in which “modern” medicine has been the dominant form of health-care. To ensure public safety and continued confidence in alternative therapies, and their proper integration with western therapeutic systems, government regulatory actions, such as those mentioned above, are essential.

The survey also found that a high proportion (78.2%) of study participants were aware of the recently introduced government provision for registration of Chinese medicine practitioners but that only about 20% considered that such registration would make them more confident about consulting a registered Chinese medicine practitioner, or that the registration system would protect the public against unqualified practice. Moreover some 80% of the respondents indicated that they would consult a Chinese medicine practitioner who was not registered. In addition, the majority of the respondents believed that Chinese medicine should be regulated in the same way as western medicine. These findings are somewhat contradictory, however, it conveyed a clear message that all therapeutics should be subject to rigorous regulation in order to ensure public safety (TGA, 2003).

There is no conclusive explanation on the findings of high level of awareness of regulation while a high percentage of the respondents indicated that they would see a non-registered practitioner. This may be reflected by the common beliefs expressed by subjects that Chinese medicine had fewer side effects, which implied that Chinese medicine is generally safe and thus, risks associated with Chinese medicine practice were not clearly identified. Findings of a high percentage of the subjects self-medicated and infrequent discussion of this matter with their doctors also support such an explanation.

Although the requirement for registration of Chinese medicine practitioners was introduced not long before this study was conducted, a high percentage of response indicated that they were aware of the existence of such a regulation. However, the purpose and objective of such regulation seemed to be poorly understood. It would seem that an education campaign will be needed to inform the public of the registration system and of the advantages it offers. Since the

completion of the survey, a number of actions such as improving communication with relevant stakeholders have been taken by the Chinese Medicine Registration Board of Victoria to address these matters (Chinese Medicine Registration Board of Victoria, 2004).

Despite the shortcomings of the sampling method, the findings of the current study indicated that Chinese medicine has a substantial presence in Melbourne. The study has also been of value in identifying beliefs and perceptions about Chinese medicine in an Australian population. It is worth-mentioning that the public perception on the safety issues of Chinese medicine needs attention. Clearly, a larger, randomised survey is warranted, and ideally should be a nationwide survey designed to evaluate accurately the usage and beliefs in Chinese medicine in each of the states and territories of Australia. At the time of finalising this article, such an Australian national population-based study on complementary medicine usage, employing Computer Assisted Telephone Interview (CATI) and Random Digit Dialling (RDD) sampling methods is being implemented by our institution.

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