

# Guest Editorial

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## Evidence-based Chinese Medicine: Are We on the Right Track?

In late 2006, a public debate in China on whether or not traditional Chinese medicine should remain a key component of the Chinese public healthcare system resulted in a formal response by the Chinese Ministry of Health. The Government's position was that it strongly supported the retention of Chinese medicine in the healthcare system. The statement pointed out the substantial contributions that Chinese medicine has made, and continues to make, to the contemporary healthcare needs of China. However, despite Government support, the debate has continued, much to the bewilderment of health authorities, media and academics outside China.

Chinese medicine contributes a great deal to China's healthcare services, being used for the treatment of a wide range of conditions. Its therapies are frequently used in combination with Western medicine. Indeed, throughout the country there are many institutions that deliver integrated training in Western medicine and Chinese medicine. However, given the persistence of the debate about whether Chinese medicine continues to have a role in healthcare delivery in China, a question that has to be asked is, 'Have the Chinese effectively addressed integration of Chinese and conventional medicine?' I suggest that the answer to this question is 'no'. A related issue, that has concerned me since I commenced my Chinese medicine degree in Guangzhou, China in 1982, is whether or not the principles and practices of Chinese medicine should be grounded in scientific evidence.

During the twenty years since I graduated, I have frequently pondered why I dedicate myself to teaching, researching and practising Chinese medicine. The answer is always the same and quite simple. Before I received my university training, I personally experienced the benefits of Chinese medicine therapy. During my pre-university schooling, I suffered from a persistent, recurring condition which seriously impacted both on my studies and on my lifestyle in general. Eventually my father arranged for me to consult a local doctor, who was

qualified in both Western and Chinese medicine, and who had a reputation in my home town as somewhat of a 'miracle healer'. After a thorough assessment of my condition, I was prescribed herbal medicine. After several months of treatment, it was clear that my condition had improved, to the extent that I was able to resume my studies at school and engage in the other activities of youth that had been previously denied me. This experience of the healing powers of Chinese medicine had a significant influence on my subsequent choice to take up Chinese medicine as a career.

When I finished my Bachelor of Medicine, I started out as a practitioner of Chinese medicine and shortly afterwards managed to combine practice with a clinical teaching role. I soon found myself responding to my patients' anxieties about their conditions and their prognoses. Frequently they wanted reassurance that Chinese medicine was the most appropriate treatment for their condition and that it was safe.

I will always be indebted to two of my professors at Guangzhou University of Chinese Medicine: the head of my department, Professor Yang Wenhui, an expert in neurology, who taught me the principles of Western medical diagnosis and their integration with Chinese medicine practice; and Professor Lai Shilong, an expert in clinical epidemiology in the Department of Research at the University. Professor Lai, who had spent some time at McMaster University in Canada, introduced me to the concept of evidence-based medicine and convinced me of its relevance to Chinese medicine. Professor Lai established the Chinese National Centre for Design, Measurement and Evaluation (DME) for Chinese Medicine, at Guangzhou University of Chinese Medicine. This Centre, which was the only one of its kind in China, attracted great interest from medical academics throughout the country and was to have a major influence on the development of Chinese medicine over the subsequent two decades. The programs of the Centre for DME for Chinese

Medicine were all directed at developing an underpinning evidence-base for Chinese medicine.<sup>1</sup> The ultimate objective was to integrate Chinese medicine and Western medicine, whilst retaining the key principles and underlying values of Chinese medicine that had been developed over several thousand years. Of course, there are many who oppose the move to integration, declaring that the evidence-based approach is not suitable for the ancient system of healthcare<sup>2</sup> and that the traditional methods and experience should be the only considerations in the Chinese medicine paradigm.

Of all the forms of traditional medicine, globally, Chinese medicine is the most established. Over thousands of years its development has been documented and preserved. However, much of the well-organised archival material can now be reinterpreted in the context of contemporary scientific knowledge. As for Western medicine there is an emphasis on the collection of evidence to define specific disease syndromes. However, unlike its Western counterpart, so far the Chinese medicine systems have not provided a means of determining the quality of clinical evidence for its effectiveness.<sup>3</sup>

In recent decades, Chinese medicine has been increasingly embraced in Western communities. In part, this results from the inability of Western medicine to effectively deal with the increasing incidence of the many chronic illnesses associated with increasing life span. In part, the increased popularity is due to a preference for therapies which are considered to be holistic, rather than disease-focused. In part, it is due to concerns about adverse effects of conventional therapeutics. Initially, acupuncture was the predominant form of Chinese medicine in common use in the West, being practised by both conventional medical practitioners and traditional Chinese medicine practitioners. However, with the introduction of degree programs in Chinese herbal medicine in the universities of Western countries, the popularity of Chinese herbal therapies has increased substantially. This has been the experience in many Western societies, including Australia.<sup>4</sup>

There are continuing concerns about Chinese medicine, in particular, about what is still considered to be a lack of evidence for its safety and efficacy.<sup>5</sup> Safety issues about acupuncture now seem to have been settled, probably due to markedly improved training in the therapy. However, concerns about the safety of herbal medicine persist. These have been reinforced by recent findings that a number of herbal ingredients have serious toxicities, some of which may be life-threatening.<sup>6</sup> There is also growing concern about the potential for herbal medicines to interact adversely with conventional medicines, that is, the possibility of herb–drug interactions.<sup>7</sup>

For both acupuncture and Chinese herbal medicine, lack of evidence of clinical efficacy will continue to impact on

public acceptance of the therapy. The increasing emphasis on evidence-based Chinese medicine is supported by leading Chinese medicine researchers in China and elsewhere. There is no doubt that Chinese medicine is benefiting from high-quality scientific research that evaluates clinical evidence of efficacy to the standards that apply to conventional treatments. Examples of such outcomes include Chinese herbal treatments for irritable bowel syndrome<sup>8</sup> and allergic rhinitis,<sup>9</sup> and acupuncture treatments for chronic pain.<sup>10</sup> However, progress in evidence-based development of Chinese medicine has been spasmodic. This is due to the scarcity of well-trained researchers and the limited availability of funding for such research. With respect to the latter, a recent positive development in Australia was the decision of the National Health and Medical Research Council, this year, to allocate an initial \$5 million to support CAM research. Hopefully, this initiative will see continued funding for CAM in future years.

Another impediment to the progress of Chinese medicine research is the existence of significant methodological challenges, for example, devising appropriate sham/placebo control interventions for clinical trials of acupuncture, and meeting the stringent regulatory requirements of therapeutic regulatory authorities for phase II trials on herbal medicine therapies. Also, the theoretical requirement for individualised treatments with Chinese medicine does not sit well with conventional clinical trial methodology.

In conclusion, much effort has been made globally to promote evidence-based Chinese medicine development and there has been considerable progress. However, there remain major challenges. It is pleasing that Australia has been playing a leading role in the move towards evidence-based traditional medicine, including in areas such as regulation, education, and professional development. However, greater and concerted efforts of governments, the profession and research and training institutions are required. The World Health Organization (WHO) has adopted the evidence-based approach for ongoing traditional medicine development. In recent years, WHO has developed and promulgated traditional medicine terminology standards, clinical practice guidelines and disease classification. It is my view that we are on the right track, but realisation of the full potential of Chinese medicine to contribute to the healthcare needs of communities will be largely dependent on how effectively we can demonstrate that the undoubted benefits of traditional therapies can be supported by scientific evidence.

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## REFERENCES

1. Lai SL, Hu JQ, Guo XF. Evidence-based medicine and clinical studies of traditional Chinese medicine. *J Guangzhou Univ Tradit Chin Med* 2000;17(1):1–8.
2. Tonelli MR, Callahan TC. Why alternative medicine can not be evidence-based. *Acad Med* 2001;76(12):1213–20.
3. Tang JL, Wong TW. The need to evaluate the clinical effectiveness of traditional Chinese medicine. *Hong Kong Med J* 1998;4(2):208–10.
4. Xue CC, Wu Q, Zhou WY, Yang WH, Story DF. Comparison of Chinese medicine education and training in China and Australia. *Ann Acad Med Singapore* 2006;35:775–9.
5. Hensley MJ, Gibson PG. Promoting evidence-based alternative medicine. *Med J Aust* 1998;169(11–12):573–4.
6. Cheung T, Xue CC, Leung K, Chan K, Li CG. Aristolochic acids detected in some raw Chinese medicinal herbs and manufactured herbal products – a consequence of inappropriate nomenclature and imprecise labelling? *Clin Toxicol* 2006;44(4):371–8.
7. Zhou SF, Zhou ZW, Chen X, Li CG, Herington A. Identification of drugs that interact with herbal medicines. *Drug Discov Today* 2007 [In press].
8. Bensoussan A, Talley NJ, Hing M, Menzies R, Guo A, Ngu M. Treatment of irritable bowel syndrome with Chinese herbal medicine. *JAMA* 1998;280(11):1585–9.
9. Xue CC, Hugel H, Li CG, Story DF. Does acupuncture or Chinese herbal medicine have a role in the treatment of allergic rhinitis? *Curr Opin Allergy Clin Immunol* 2006;6(3):175–9.
10. Xue CC, Dong L, Polus B, English RA, Zheng Z, Da Costa C et al. Electro-acupuncture for tension type headache: a randomised controlled trial. *Headache* 2004;44(4):333–41.

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## Letters to the Editor

Dear Zhen Zheng

Congratulations on a well-presented journal. I like the touch of it – important for us tactile praccies. I immediately made myself comfortable on my deck in the evening Queensland air to have a read. I have to admit though, I skimmed through the heavy research papers.

The paper I enjoyed most was ‘Oculomotor Palsy Treated with Electroacupuncture’ [by Yong-Suk Kim]. It got to the heart of clinical practice, despite its simplicity. Yes, this is what I want to hear. Reading these case studies creates confidence in individual acupuncturists to treat similar unusual cases that they may not have treated before, and also provides groundwork on how to tackle it.

I thought the article by JD Ryan on ‘The Use of Evidence in Acupuncture Clinical Practice’ very relevant. How many of us

working acupuncturists want evidence on the efficacy of acupuncture? Are we not satisfied through experience that most of the time there is a positive result? Think of the billions of dollars spent on drug trials and yet there are still such varying results when these drugs are finally prescribed to individuals. How can we put a holistic treatment such as acupuncture in a test tube? Okay, so research plays a role, but let’s not get carried away.

I will be happy if at least one acupuncture case study goes into each issue. Yes, I know, it is up to us practitioners in the field to write such case studies and muster up our courage to submit a manuscript with all its protocols.

*Patsy Wilcox  
Ferny Hills, Queensland*

To Zhen and team

Congratulations on the production of such a high quality journal! I found the articles interesting and thought-provoking, especially Damien Ryan’s examination of the belief systems underlying the practice of Chinese medicine. I also appreciate the efforts to include research which is clinically useful to practitioners in a reductionist world. It is difficult to both honour and question the fundamental principles of Chinese medicine; however, I believe this is the way forward.

*Jenny Layton  
Balliang, Victoria*