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Review Article

Acupuncture in Australia: regulation, education, practice, and research



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ABSTRACT

Acupuncture was introduced to Australia as early as in the 1880s, and is a form of complementary and alternative medicine in this country. In the past 2 decades since the 1990s, acupuncture has experienced a rapid growth. Today, nearly 4000 acupuncturists are registered with the Chinese Medicine Board of Australia. "Acupuncturist," "Oriental medicine practitioner," and "Chinese medicine practitioners" are protected titles for registered acupuncturists. A bachelor's degree of 4 years in related fields is the minimal requirement for registration in Australia. Three public universities and three major private colleges offer nine undergraduate and three postgraduate programs that are approved by the Chinese Medicine Board of Australia. Those three universities also offer Master-degree and Doctor of Philosophy programs. Acupuncture is well accepted by the Australians, with 10% having received this treatment and 80% general medical practitioners referring their patients to acupuncture service. All private health insurance schemes provide rebates to patients receiving acupuncture treatment, and third-party payment is also available in six of eight Australian states and territories. Research output in acupuncture has increased greatly since 2000. A majority of research focuses on acupuncture and Tai Chi as treatment modalities, and mainly investigates their mechanism of action, associated pain, and gynecological and respiratory conditions. The future direction of acupuncture in Australia is to introduce this medicine in hospitals and gain access to the medical benefit scheme so that acupuncture can be accessed by a wider community, in particular those who come from a disadvantaged background. In conclusion, improved education, regulation, and research of acupuncture in Australia put this country in a leading position among Western countries with respect to acupuncture services.

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1. Introduction

Acupuncture first came into Australia as a part of "Chinese medicine" during the gold rush period with gold diggers in the 1880s. Today, acupuncture is a commonly used form of complementary and alternative (CAM) medicine practiced by Chinese medicine practitioners as well as other health professionals, including Oriental medicine practitioners, medical doctors, physiotherapists, nurses, midwifes, chiropractors, and osteopathy and naturopathy practitioners. One in 10 Australians has been treated by acupuncture in the past 12 months. Over 80% of general medicine practitioners refer their patients to acupuncturists at least once per year.

In Australia, acupuncture became a registered profession in 2000 in the state of Victoria; national registration of acupuncturists was made mandatory in 2012. Up to now, over 4000 practitioners have registered with the Chinese Medicine Board of Australia (CMBA).³ This number does not include many other health practitioners who also practice acupuncture.

The CMBA is under the governance of the Australian Health Practitioner Regulation Agent, a government body that manages the registration of all health practitioners. Guided by the Australian Health Practitioner Regulation Agent, the CMBA develops a series of guidelines to regulate, guide, and assess the practice and education of Chinese medicine.

This paper will provide an overview of the history of acupuncture in Australia, related professional bodies, and regulations on practice, education, and research. The paper ends with a brief discussion on the future direction of acupuncture in Australia.

2. History of acupuncture in Australia

Acupuncture has experienced four stages of development in Australia4: self-management stage (1880s-1960s); professional development stage (1970s-1980s), when acupuncture training was offered by private colleges; standard-setting stage (1990s), when undergraduate programs were offered in four public universities; and finally regulation (from 2000 until now). The last stage started in 2000 with the registration of Chinese medicine practitioners in Victoria, the first state to regulate the practice of both acupuncture and Chinese herbal medicine. In the next 12 years, Victoria remained the only state in Australia allowing registration of Chinese medicine practitioners. Recently, Chinese medicine is a nationally registered profession, along with 13 other professions (Table 1). Australia became the eighth country to have Chinese medicine directly regulated by central governments, after China, Hong Kong, Japan, South Korea, Singapore, Taiwan, and Malaysia.

3. Professional bodies

There are many associations in Australia that provide membership to acupuncture and/or Chinese herbal medicine practitioners. Among them, the largest four are the Australian Acupuncture and Chinese Medicine Association (AACMA), Federation of Chinese Medicine and Acupuncture Australia, Australian Natural Therapists' Association, and Australian

Table 1 - National	registration s	chedule in Australia.

Registered in 2011	Registered in Jul 2012
Chiropractic	Aboriginal and Torres Strait
	Islander health practice
Dental care practice	Chinese medicine practice
Medical practice	Medical radiation practice
Nursing and midwifery	Occupational therapy
Optometry	
Osteopathy	
Pharmacy	
Physiotherapy	
Podiatry	
Psychology	

Note. Modified from "National Registration and Accreditation Scheme (NRAS)" by Department of Health, Australian Government, 2013, http://www.health.gov.au/internet/main/publishing.nsf/Content/work-nras

Traditional-Medicine Society. The first two are specifically for practitioners of Chinese medicine, whereas the latter two are for those of natural or traditional therapies.

With over 2000 members, AACMA is the largest and peak association representing Chinese medicine community in Australia. Prior to national registration, AACMA set the education and accreditation standards of Chinese medicine for private health fund providers. After registration, the education and registration standards are now set by the CMBA.

4. Registration and legislation

4.1. Protected titles

The new Registration Law protects the titles of "acupuncturist," "Chinese herbal dispenser," "Chinese herbal medicine practitioner," "Oriental medicine practitioner," and "Chinese medicine practitioner." The title of Tuina or Chinese massage practitioner is not protected, as the therapy is not included in the national registration scheme. Practitioners can register in one or more divisions, including acupuncture, Chinese herbal medicine, and/or Chinese herbal dispensing. The law protects the titles, but not the practice; that is, anyone can practice something like acupuncture or Chinese herbal medicine as long as the person does not lead the patients to believe that he/she is practicing acupuncture or Chinese herbal medicine. Among allied health medicines or CAMs, the only protected practice is that of cervical manipulation, which can be performed only by registered chiropractors, osteopathy practitioner, or physiotherapists.

4.2. Composition of registrants

Up to December 2013, 4093 practitioners have been registered by the board.³ Among them, nearly half registered with both acupuncture and Chinese herbal medicine divisions, one-third with acupuncture only, over 10% with all three divisions (i.e., acupuncture, Chinese herbal medicine, and Chinese herbal dispensing), and < 1.5% with Chinese herbal medicine only, which account for more than 97% of registrants practicing acupuncture.

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Table 2 – Australian popu	lation and number o	f practitioners st	ate by state.		
	Population at the end of June 2013 (in thousands)	% population of each state	Number of registered CM at the end of December 2013	% CM of each state	Number of people per CM
New South Wales	7408	32	1662	41	4457
Victoria	5738	25	1150	28	4989
Queensland	4659	20	780	19	5973
South Australia	1671	7	155	4	10,779
Western Australia	2517	11	202	5	12,461
Tasmania	513	2	34	1	15,088
Northern Territory	240	1	12	0	19,958
Australian Capital Territory	383	2	62	2	6184
Total or average	23,131		4093		5651

Note. Modified from "Chinese Medicine Registrant Data: December 2013," by the Chinese Medicine Board of Australia, 2012, http://www.chinesemedicineboard.gov.au/About/Statistics.aspx.

CM, Chinese medicine practitioners.

Among the registrants, 40% are located in the state of New South Wales, 28% in Victoria, 19% in Queensland, and the rest in other states and territories. This is generally consistent with the population distribution in Australia, with the most populated state having the highest number of registered Chinese medicine practitioners. However, the patient-practitioner ratio varies from state to state (Table 2). As of June 2013, the total population of Australia is 23 million, with one-third in New South Wales, a quarter in Victoria, and one-fifth in Queensland.⁵ This population distribution indicates about 4500 people per Chinese medicine practitioner in New South Wales, 5000 in Victoria, 6000 in Queensland, and nearly 20,000 in Northern Territories. On average, in Australia there is one Chinese medicine practitioner per 5650 people. There is a shortage of Chinese medicine practitioners in Western Australia, South Australia, Northern Territory, and Tasmania.

Among the registrants, 55% are females and the rest are males. Over half of the registered practitioners are aged between 40 years and 60 years, and about 5% are younger than 30 years, indicating that the majority of the practitioners are middle aged or older. There may be a shortage of Chinese medicine practitioners in the next 20 years, given that < 5% of practitioners are younger than 30 years.

4.3. CMBA and registration standards

The CMBA was formed in 2011 to work with the Australian Health Practitioner Regulation Agent to set up various regulations, guidelines, and standards.⁶ The board has nine members and six practitioners, representing six states and two territories, and three community members. Practitioner members include acupuncturists, Chinese herbal medicine practitioners, and Chinese herbal dispensers.

One must meet all registration standards to be able to register with the board and renew the registration each year. Table 3 outlines the mandatory standards for registration and renewal.

5. Education and accreditation

Prior to 2000 when Chinese medicine was registered in Victoria, the education standard was mainly self-regulatory by the

profession. According to the course accreditation standards set by the Chinese Medicine Registration Board of Victoria, acupuncture program studied at the bachelor level must have a minimal of 4 years' training, which is in contrast to the standard 3-year bachelor's degree in liberal arts or science in Australia. The acupuncture training course is divided equally between theory, clinical practice, and study of Western medical sciences. Professional and practice issues are also included, and the content covers ethical conduct, regulatory issues, and practice management. Courses on professional issues are particularly important and unique to the Australia situation, as acupuncture is practiced mainly in private clinics in Australia.

Since 2012, under the grandparenting provision of the National Law, a number of advanced diploma and bachelor's degree programs from Australia, China, and other countries have been recognized. Practitioners with those qualifications are eligible to be assessed by the board for registration. People with a qualification lower than advanced diploma or from unrecognized institutions are not eligible for registration. The grandparenting scheme finishes in July 2015.

5.1. Approved Australian programs

As of October 2013, nine existing bachelor programs have been approved: two programs from the Endeavour College of Natural Health nationally, three double-bachelor-degree programs from the Royal Melbourne Institute of Technology (RMIT) University, one from the Southern School of Natural Therapy in Melbourne, one from the Sydney College of Traditional Chinese Medicine, and two from the University of Technology in Sydney (Table 4).7. At the postgraduate level, two master-degree programs from the RMIT University and one bachelor-degree program leading to a master-degree program from the University of Western Sydney have been approved (Table 4). Although the University of Western Sydney program is designed for entry into a bachelor's degree program for those who may or may not have health science background, masters' degrees at the RMIT University require graduation in health sciences and are designed for existing health practitioners, including medical doctors, physiotherapists, chiropractors, osteopathy practitioners, nurses, occupational therapists, naturopathy practitioners, massage

Title	Explanation	Comments	
Continuing professional development registration standards	A minimum of 20 h are required and various activities are covered		
Criminal history registration standards	Criminal history is checked, and CMBA decides if the offence is relevant to the practice of Chinese medicine		
English language skill registration standards	Completion of 5-y full-time education in one of the approved English speaking country, or an overall IELTS score of 7 or more, with no individual score below 6.5 in the past 2 y	Those who do not meet the requirement have conditional registration imposed on them	
Professional indemnity insurance agreement registration standards	Covers a minimum of \$5 million for any single claim against the practice		
Recency of practice	Practitioners must have sufficient professional practice experience to ensure competency	Those who have not practiced for more than 3 y will require a re-entry plan	
		New graduates who apply for registration within 2 y of graduation are exempted from the requirements of this standard	
Grandparenting and general registration eligibility registration standards			

Note. Modified from "Registration Requirements" by Australian Health Regulation Agency, 2010, http://www.ahpra.gov.au/Registration/Registration-Process/Registration-Requirements.aspx and "English language skills registration standard" by Chinese Medicine Board of Australia, 2012, http://www.chinesemedicineboard.gov.au/Registration-Standards.aspx.

CMBA, Chinese Medicine Board of Australia; IELTS, International English Language Testing System.

therapists, Chinese medicine practitioners, and Oriental medical practitioners, who want to incorporate acupuncture or Chinese herbal medicine into their practice or to upgrade their training. In Australia, the RMIT University programs are the only part-time programs for busy health practitioners.

5.2. Chinese Medicine Accreditation Committee and the accreditation standards

The CMBA established the Chinese Medicine Accreditation Committee to set up accreditation standards and assess programs and education providers. Whether a program will be accredited or not is decided by the CMBA. Once a program is accredited, graduates from the program will be able to register with the CMBA if they meet all mandatory registration requirements. To date, no existing approved programs have been assessed by the committee. All programs will be assessed in 2014 and 2015.

The committee consists of six members, including two education experts from outside the domain of Chinese medicine and four Chinese medicine educators, practitioners, and researchers. The work of the committee is assisted by a group of assessors and an accreditation unit. This committee assesses neither overseas courses nor skills for immigration purpose.

The committee developed and released the "accreditation standards" in December 2013. Unlike the previous standards

set by the Chinese Medicine Registration Board of Victoria, the new standards are nonprescriptive and focus on the outcomes rather than focusing on the course content. For instance, there is no detailed description on the time needed for each component of study, the number of clinical hours required, or the ratio between lecture and practical classes. The new standards put the onus on the education providers to demonstrate whether and how each standard is met and assessed. Such outcome-focused standards encourage development of innovative teaching and assessment methods and thorough documentation of the process.

6. Practice and health fund rebates

Acupuncture is generally well received in Australia. Nearly 85% of 544 general practitioners surveyed considered acupuncture to be effective and safe for primary care. The referral rate is as high as 80% in some cities and about 70% in rural Australia. Acupuncture is mainly practiced in private clinics, including those providing acupuncture, Chinese medicine, Oriental medicine, general medicine, physiotherapy, and other health services. In recent years, multidisciplinary clinics have become common, where acupuncturists work with medical doctors; allied health professionals, such as physiotherapists, chiropractors, and osteopathy practitioners; or other complementary medicine professionals, such as

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naturopathic practitioners. Acupuncture is yet to be introduced in hospitals as one of the routine interventions.

Medicare is the universal health care scheme in Australia; the patients have to pay only a small amount or nothing for medical diagnostic procedures and interventions. Expenses related to acupuncture practiced by qualified medical doctors are covered by the Medicare, and patients either do not pay anything or pay only a little amount. A 2013 study¹¹ has shown that 3.4% general practitioners made claims for acupuncture service through Medicare, and the total cost for acupuncture is 0.16% of the Medicare expenditure of all general practitioners. However, costs related to acupuncture practiced by registered

acupuncturists is not covered by Medicare; these are covered by private health insurance funds. Australians are encouraged to buy private health insurance so as to reduce the pressure on the public system. All private health insurance companies provide rebate to acupuncture treatment. Such treatments do not require a medical doctor's referral.

Additionally, in six of eight states and territories, Worksafe bodies and traffic accident commissions or equivalent organizations cover acupuncture treatment-related expenses. ¹² This is called third-party payment. A medical doctor's referral and approval from the relevant authority are required prior to the commencement of treatment.

Content	No. of papers	%	Content	No. of papers	%
Mechanisms	55	17.5	ENT and speech	5	1.6
Pain	51	16.2	Education	5	1.6
Gynecology and obstetrics	44	14.0	Veterinary science	4	1.3
Research methodology	24	7.6	Cardiovascular conditions	4	1.3
Respiratory conditions	19	6.0	Pediatrics	3	1.0
Safety	15	4.8	Gastroenterology	2	0.6
General review	15	4.8	Neurology	2	0.6
Mental health	13	4.1	Dermatology	1	0.3
Endocrine	12	3.8	Cognitive impairment	1	0.3
Falls, balance, and physical disability	11	3.5	Men's health	1	0.3
Cancer	10	3.2	General well-being	1	0.3
Drug addiction	8	2.5	Others	2	0.6
Population study	7	2.2			

7. Research

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Australian research in acupuncture and related techniques is strong. A search in PubMed and Web of Science databases identified 315 papers about acupuncture directly. There was a dramatic increase in the publication since 2000, and over 70% of the papers were published in the past 14 years (Fig. 1). Australian authors completed 14 Cochrane Systematic Reviews about acupuncture, ^{13–26} and all were published after the year 2000. The majority of the 315 papers are related to acupuncture, electroacupuncture, and laser acupuncture (Fig. 2). This is followed by Tai Chi research. There are very few studies

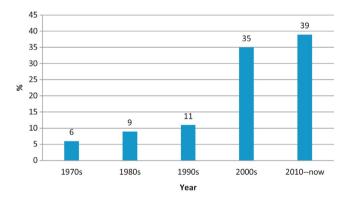


Fig. 1 – Acupuncture papers published over the past 40 years in Australia.

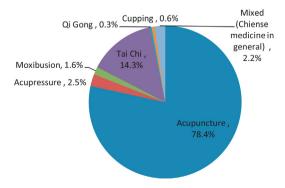


Fig. 2 – Percentage of papers published on acupuncture and related techniques.

on cupping and Qi Gong. The research topics vary widely, from mechanisms to education, and from general well-being to specialized areas (Table 5). Nearly 18% of the studies are on mechanisms of acupuncture, followed by studies on pain, gynecological and obstetrical conditions, and respiratory conditions. Research on pain includes musculoskeletal pain, visceral pain, and acute and chronic pain. Gynecological and obstetrical conditions include fertility, symptoms during pregnancy and labor, and polycystic ovarian syndromes. Respiratory conditions include hay fever, asthma, and chronic obstructive pulmonary disease. There are very few studies in children regarding their neurological conditions, dermatological conditions, and cognitive impairment.

Multidisciplinary collaboration is the trend in acupuncture research. Using pain as an example, ²⁷ 22 systematic reviews and clinical trials focusing on acupuncture treatment for pain were published during 1970–2009. Out of these, 14 were collaborative research between Chinese medicine, Western medical doctors, physiotherapists, statisticians, and pharmacists. More than 50% were published in mainstream medical or sport medical journals, and about 30% in complementary or Chinese medicine journals.

All four public universities (RMIT University, University of Victoria (UV), University of Western Sydney, and Univerity of Technology, Syndey (UTS)), which provide education in Chinese medicine, conduct research on acupuncture. Many other public and private universities that provide training in Western medicine, complementary medicine, or physiotherapy also conduct acupuncture research. These institutes include but not limited to Melbourne University, Monash University, Deakin University, Latrobe University, Queensland University, University of Sydney, University of New South Wales, University of Newcastle, Charles Sturt University, Flinders University, University of South Australia, Curtin University, and University of Notre Dame Australia. Studies are often conducted in collaboration with hospitals.

Being a form of CAM in Australia, acupuncture attracts limited funding. Using pain as an example, of 22 systematic reviews and clinical trials on acupuncture published between 1970 and 2009, 12 did not mention funding, six were funded internally or self-funded by authors, and only three were funded at the federal level.²⁷ CAM research is part of the strategic plan of the National Health and Medical Research

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Council (NHMRC), the only medical research funding body at the federal government level. From 2000 to 2013, NHMRC granted over \$86 million to fund 641 projects, and between 2014 and 2017, the government has committed over \$100 million for 74 projects. Ramong all 715 CAM projects, 13 are specifically about acupuncture, including manual acupuncture, electroacupuncture, and laser acupuncture, with a total funding of about \$4.7 million, which is equivalent to 2.5% of the total funding for CAM research between 2000 and 2017.

Over the years, NHMRC strategies for CAM have changed. Between 2010 and 2012, NHMRC aimed to examine "alternative therapy claims" through supporting evidence-based research. In recent years (2013–2015), NHMRC aims to investigate "claiming benefits for human health not based on evidence" through supporting development of resources to facilitate discussion between clinicians and patients on CAM use, and to review effectiveness of CAM and other new projects in CAM areas. ²⁹ Such studies and reviews will ultimately help promote the use of some CAMs and reject the use of others.

In summary, Australian researchers are highly productive with very limited funding. Although the Australia government encourages evidence-based approaches to CAM research, including acupuncture, acupuncture research requires much more funding. Solely relying on government funding will not be practical. Funding from education and research institutions, professional bodies, philanthropic organizations, commercial sources, and overseas organizations is needed to conduct further research on acupuncture in Australia.

8. Australian Journal of Acupuncture and Chinese Medicine

Australian Journal of Acupuncture and Chinese Medicine (AJACM) is the only peer-reviewed journal dedicated to Chinese medicine in the Pacific region, and is the official journal of the AACMA. It is now in its 8th year of publication. AJACM is included in Scopus database, and its full text can be accessed from EBSCOhost. This journal aims to acknowledge the diversity of practice, encourages research rigors, and celebrates integration of research, practice, and education. It focuses on human research, and publishes systematic reviews, clinical trials, case series, and well-argued and referenced debate papers. Papers published include those on mechanistic, clinical, educational, or regulatory research. Publishing in the journal is free. The publisher of the journal intends to make the papers accessible to all readers. After a 1-year lag, all papers of this journal are available free online to the readers. Further information can be found at http://www.ajacm.com.au/.

9. Future direction and conclusion

In the past 20 years, the status of acupuncture education and regulation in Australia has improved tremendously. The next step for acupuncture in Australia is to introduce this treatment option to hospitals. At this stage, hospital-based acupuncture service is either of research nature or provided by non-Chinese medicine practitioners. The use of acupuncture in Australian hospitals is highly feasible. A recent study on the introduction of acupuncture services by the RMIT University

to an emergency department³⁰ in a public hospital in Victoria has attracted much national attention. Within 7 months, 200 patients were treated with acupuncture in addition to the standard medical care, and over 80% of them were willing to have further acupuncture treatment. The pain reduction was over 2.3 on a 10-cm Visual Analogue Scale. The study found that acupuncture was effective and safe, and patients were satisfied by this additional service. Closely linked to this step is the fact that acupuncture is included in the Medicare Benefit Scheme. This step is crucial not only to hospital-based practice but also for promoting equality in health care. Australians with disadvantaged backgrounds cannot afford acupuncture treatment provided by registered acupuncturists at this stage.³¹

Introduction of acupuncture treatment in hospitals may prove to be a complicated process. Evidence-based research and feasibility studies are important steps leading to enhanced utilisation of acupuncture in hospitals. Funding, policy, and culture changes are also necessary. At present, hospital-based CAM, including acupuncture, is free to patients, and relies on research funding or clinic funding.32 Until acupuncture-related expenses are covered by Medicare, acupuncture practice in hospital remains unviable. Another obstacle is professional indemnity arrangement in hospitals, in particular in public hospitals. How acupuncture practice in hospital will be indemnified is yet to be resolved. Finally, understanding the culture and accepting holism are necessary. Traditional acupuncture treats the whole person, and its underpinning theory departs from the reductionism that Western medicine practices. Such a division can be perceived as an obstacle for integrating acupuncture into hospital. This obstacle has now been overcome due to two main reasons. First, training in Western medical sciences is now part of all accredited Chinese medicine education programs. Graduates from recognized programs are able to adopt Western medical language for better communication. Second, a two-way communication is taking place. A recent Australian study found that practice managers of community medical centers or hospitals appreciate the mind-body integration that CAM offers to their patients, and accept the benefit and practice of CAM.³² NHMRC currently supports the reviews in to CAM and development of clinician resources. This will be an important starting point for enhancing clinicians' understanding of CAM and for changing culture.

In summary, early introduction of acupuncture education into Australian public universities, national registration, and full access to all private health insurance funds put Australia in a leading position among Western countries with respect to acupuncture services. Acupuncture research is becoming stronger, and academics and researchers from Chinese medicine and other disciplines have an increased interest in those areas. With enhanced research capacities and quality graduates, Australia is likely to continue its leading role in acupuncture practice among Western countries in the next decade.

Conflicts of interest

The author is on staff at the RMIT University, is the editor-in-Chief of the Australian Journal of Acupuncture and Chinese Medicine, and was a national board member of the Australian Association of Acupuncture and Chinese Medicine.

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REFERENCES

- Xue CCL, Zhang TL, Lin V, Myers R, Polus B, Story DF. Acupuncture, chiropractic and osteopathy use in Australia: a national population survey. BMC Public Health 2008;8: 105–12.
- 2. Easthope G, Tranter B, Gill G. Normal medical practice of referring patients for complementary therapies among Australian general practitioners. *Complement Ther Med* 2000;8:226–33.
- CBMA (Chinese Medicine Board of Australia). Chinese medicine registrant data, 2013. Available from: http://www. chinesemedicineboard.gov.au/About/Statistics.aspx. Accessed March 23, 2014.
- 4. Xue CCL, Zhang AL, Yang W, Zhang S, Story D. Recent developments of acupuncture in Australia and the way forward. Chin Med 2009;4:1–4.
- ABS (Australian Bureau of Statistics). 3101.0—Australian demographic statistics, 2013 Available from: http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0. Accessed February 2, 2014.
- 6. CMBA (Chinese Medicine Board of Australia). Registration standards, 2012. Available from: http://www.chinesemedicineboard.gov.au/Registration-Standards.aspx. Accessed February 2, 2014.
- 7. CBMA (Chinese Medicine Board of Australia). Approved programs of study; 2013 Available from: http://www.chinesemedicineboard.gov.au/Accreditation.aspx#standards. Accessed February 2, 2014.
- 8. CMBA (Chinese Medicine Board of Australia). Accreditation standards, 2013. Available from: http://www.chinesemedicineboard.gov.au/Accreditation.aspx#standards. Accessed February 2, 2014.
- Cohen MM, Penman S, Pirotta M, Da Costa C. The integration of complementary therapies in Australian general practice: results of a national survey. J Altern Complement Med 2005;11:995–1004.
- Wardle JL, Sibbrit D, Adams J. Acupuncture referrals in rural primary healthcare: a survey of general practitioners in rural and regional New South Wales, Australia. Acupunct Med 2013;31:375–82.
- Wardle JL, Adams J, Sibbritt DW. Acupuncture in Australian general practice: trends in reimbursed acupuncture services from 1995 to 2011. Acupunct Med 2013;31:45–50.
- Zheng Z. Chinese Medicine. In: Zetler J, Bonello R, editors. Essential law, ethics, and professional issues in CAM. 1st ed. Sydney: Elsevier Australia; 2011.
- Zhu X, Hamilton KD, McNicol ED. Acupuncture for pain in endometriosis. Cochrane Database Syst Rev 2011;9: CD007864.

- 14. Smith CA, Hay PP, Macpherson H. Acupuncture for depression. Cochrane Database Syst Rev 2010;1:CD004046.
- 15. Smith CA, Hay PP. Acupuncture for depression. *Cochrane Database* Syst Rev 2005;2:CD004046.
- Smith CA, Crowther CA, Grant SJ. Acupuncture for induction of labour. Cochrane Database Syst Rev 2013;8:CD002962.
- 17. Smith CA, Crowther CA. Acupuncture for induction of labour. Cochrane Database Syst Rev 2004;1:CD002962.
- Lim DC, Chen W, Cheng LN, Xue CC, Wong FW, O'Sullivan AJ, et al. Acupuncture for polycystic ovarian syndrome. Cochrane Database Syst Rev 2011;8:CD007689.
- Coyle ME, Smith CA, Peat B. Cephalic version by moxibustion for breech presentation. Cochrane Database Syst Rev 2012;5:CD003928.
- Coyle ME, Smith CA, Peat B. Cephalic version by moxibustion for breech presentation. Cochrane Database Syst Rev 2005;2:CD003928.
- Cheong YC, Dix S, Ng EHY, Ledger WL, Farquhar C.
 Acupuncture and assisted reproductive technology. Cochrane Database Syst Rev 2013;7. CD006920.
- 22. Green S, Buchbinder R, Barnsley L, Hall S, White M, Smidt N, et al. Acupuncture for lateral elbow pain (review). Cochrane Database Syst Rev 2002;1. CD003527.
- Green S, Buchbinder R, Hetrick S. Acupuncture for shoulder pain (review). Cochrane Database Syst Rev 2005;2. CD005319, doi:005310.001002/14651858.
- 24. Deare JC, Zheng Z, Xue CC, Liu JP, Shang J, Scott SW, et al. Acupuncture for treating fibromyalgia. *Cochrane Database* Syst Rev 2013;5:CD007070.
- 25. Smith CA, Crowther CA. Acupuncture for induction of labour. Cochrane Database Syst Rev 2001;1:CD002962.
- Smith CA, Zhu X, He L, Song J. Acupuncture for primary dysmenorrhoea. Cochrane Database Syst Rev (Online) 2011;1. CD007854.
- Zheng Z, Xue CL. Pain research in complementary and alternative medicine in Australia: a critical review. J Altern Complement Med 2012;19:81–91.
- National Health and Medical Research Council (NHMRC). NHMRC research funding datasets based on burden of disease and health issues. Australian Government, NHMRC, Canberra, 2014 [cited June 20, 2014]. Available from: https://www.nhmrc.gov.au/grants/research-fundingstatistics-and-data/burden-disease-and-health-issues. Accessed June 20, 2014.
- National Health and Medical Research Council (NHMRC). Complementary medicines. Australia Australian Government, NHMRC, Canberra, 2014 [cited June 20, 2014]. Available from: https://www.nhmrc.gov.au/your-health/complementary-medicines. Accessed June 20, 2014.
- Zhang AL, Parker SJ, Smit DV, Taylor DM, Xue CCL.
 Acupuncture and standard emergency department care for pain and/or nausea and its impact on emergency care delivery: a feasibility study. Acupunct Med 2014;32:250–6.
- Easthope G, Gill GF, Beilby JJ, Tranter BK. Acupuncture in Australia general practice: patient characteristics. Med J Aust 1999;170:259–62.
- 32. Singer J, Adams J. Integrating complementary and alternative medicine into mainstream healthcare services: the perspectives of health service managers. BMC Complement Altern Med 2014;14:167–77.