

WFAS Sydney 2013: Selected Conference Abstracts

EDITOR'S NOTE: We are pleased to publish high quality abstracts from WFAS Sydney 2013 8th World Conference on Acupuncture. The conference attracted more than 250 abstract submissions. After a strict peer-reviewed process, the Editorial Board of AJACM selected 22 for publication. Each abstract was reviewed by two Editorial Board members. These abstracts were selected because of their high scientific quality and original data. We hope you enjoy reading them.

Chinese medicine in Australia: the nature of practice and perspectives of practitioners and key stakeholders

By Amber Moore (Monash University); Paul Komesaroff; Kylie O'Brien; Alan Bensoussan; Hong Xu

In 2012 the largest survey of primary Chinese medicine (CM) practitioners in Australia since 1996 was undertaken, to investigate the clinical practice features and professional structures of CM in Australia. This is particularly significant given the recent transition to a national regulatory framework for CM. Results ($n = 655$, response rate 42%) demonstrate that the current practice of CM in Australia is made up of a diverse range of practitioners, practice styles and values. Findings reveal that primary CM practitioners work in a number of settings using a variety of CM modalities, with nearly two-thirds practising within sole practices (60%), 42 per cent practising predominantly acupuncture, and 58 per cent a combination of acupuncture and Chinese herbal medicine. Participants reported 'frequently' or 'almost always' engaging in behaviours characteristic of a health professional, including: patient receipting practices, providing detailed prescriptions, engaging in ongoing professional development, and reporting adverse events. CM practitioners consider both findings from evidence based medicine research and classical CM theory and practice to be important. Key themes arising from the interviews with practitioners and key stakeholders ($n = 30$), demonstrate a variety of perspectives on issues including education, clinical practice features, continuing professional development, and the benefits and limitations of national registration. The results indicate the Australian Chinese medical workforce to be engaged within several complex structural forces, including small business constraints, increasing interaction with other health care providers, and regulatory requirements. Despite these influences, CM practitioners report engaging in a high level of professional behaviours, providing further support for the increased integration of CM into the Australian health care system.

The views of patients with anorexia nervosa receiving an acupuncture or acupressure intervention

By Sarah Fogarty (University of Western Sydney); Caroline Smith; Stephen Youyz; Sloane Madden; Geoffrey Buckett; Phillipa Hay

Background: Anorexia nervosa is a serious illness with significant morbidity. The evidence base for existing psychological and pharmacological interventions to manage anorexia nervosa is not strong, and use of new adjunctive therapies that improve the effectiveness of existing treatments and improvement in health outcomes is highly desirable. This study investigates the views of patients with anorexia nervosa receiving an acupuncture or acupressure intervention. Method: A randomised controlled trial was conducted in Sydney, Australia. Twenty-six patients with anorexia nervosa were randomised to a six-week intervention of acupuncture or acupressure with light massage. Treatment was administered twice weekly for three weeks, then weekly for three weeks. A post treatment questionnaire was administered to explore participant views of the study interventions and consultations. Questions examined important aspects of the clinical encounter including the patient's perception of the practitioners' relational empathy (CARE), treatment perceptions and the therapeutic relationship. Results: Participants highly valued the therapeutic encounter and in particular the characteristics of empathy, positive regard and acceptance, non-judgemental responses and trust. Having someone to talk to, feeling less stressed, more relaxed and contact with the study staff were also perceived to be important to the participants. Participants in both groups scored highly on the CARE scale assessing empathy, with similar mean scores obtained for acupuncture (50 SD = 0.00) and acupressure (49.5 SD = 0.885). Conclusion: Study participants perceived the therapeutic relationship and empathy as an important part of the acupuncture or acupressure intervention as an adjunct therapy for the treatment of anorexia nervosa.

The role of acupuncture in the treatment of threatened miscarriage: findings from a randomised trial and semi structured interviews

By Debra Betts (CompleMED, University of Western Sydney);
Caroline Smith; Hannah Dahlen

Objectives: Threatened miscarriage is a common complication of pregnancy with risk factors for miscarriage or premature labour. Although only a 'wait and see approach' is advised medically, treatment recommendations exist within acupuncture texts. The objective of this study was to examine the feasibility of offering acupuncture as a therapeutic treatment for women presenting with threatened miscarriage. **Methods:** A mixed methods study involving a randomised controlled trial and semi structured interviews. A manualised acupuncture protocol with individualised diet and lifestyle advice was compared to an active control group receiving a touch intervention with medical diet and lifestyle advice. Eleven participants were purposively interviewed about their experiences on exiting the trial at 12 gestational weeks. Interviews were recorded, transcribed verbatim and analysed through thematic analysis. **Results:** Forty women were successfully randomised. For those women receiving acupuncture there was a statistically significant reduction of a symptom self-selected as their primary concern ($p = 0.04$). Thematic analysis revealed that women were dissatisfied with the medical care and advice they received and saw entering the trial as 'finding something you can do'. Women valued the opportunity to 'have someone to talk to' and perceived acupuncture as having benefits for their physical symptoms of bleeding, cramping and back pain. **Conclusion:** This pilot RCT demonstrated that acupuncture was a safe and feasible intervention and provided additional benefits to touch in reducing a symptom nominated by women as a concern. Further research is justified to further explore acupuncture use in this area of clinical practice.

The efficacy of acupuncture in treatment of functional nausea, bloating and abdominal pain in patients on the characteristics of the electrogastrogram (EGG)

By Lihua Xu

Acupuncture has been used since antiquity for gastrointestinal complaints including nausea and abdominal pain, although its effects on gastric myoelectric activity are unknown. The aim of this study was to examine the effect of acupuncture on symptoms of nausea (N), abdominal pain (AP) and bloating (B) and on the characteristics of the electrogastrogram (EGG). **Methods:** 22 patients ($f = 19$, $m = 3$) aged 17–66 years, 44.14 ± 2.74 , who had symptoms refractory to conventional treatment and with normal or abnormal gastric emptying studies were studied. Symptoms of N, AP and B were scored on a visual analogue scale (VAS) with 0 for no symptoms and 100 for severe. All patients completed a VAS for symptoms on entry in the study. Fifteen minutes of baseline EGG were recorded and,

at the first study, patients drank water until full. Acupuncture needles were inserted into points P6, SP4 bilaterally and DU20 for 30 minutes. The EGG was recorded for the entire study and the patient completed the VAS for symptoms at the end of the study. Patients returned for one or two additional treatments with at least two weeks interval between treatments. Water load was not performed at the second or third visits. EGG was analysed to record the percent of power represented in the frequency ranges of 1–2.5 cpm, 2.5–3.7 cpm, 3.7–10 cpm and 10–15 cpm at baseline and during acupuncture at each treatment. Data was combined from the three studies ($n = 22$). Scores before and after acupuncture treatment were compared by ANOVA and t-test. **Results:** Acupuncture significantly decreased the severity of nausea, abdominal pain and bloating, and increased the percent power in the normal 3 cpm range in the recorded EGG. **Conclusions:** In this study, acupuncture treatment improves symptoms of nausea, abdominal pain and bloating in subjects with these symptoms of unexplained aetiology. In addition, treatment is associated with an increase in power of the EGG at three cycles per minute. Further studies are needed to determine if the change in gastric myoelectric activity can account for the symptomatic improvement. Acupuncture appears promising as a treatment option in patients.

TCM pattern differentiation for hepatitis C virus within a small sample group

By Christine Berle (University of Technology Sydney), Deirdre Cobbin, Narelle Smith, Chris Zaslowski

Background: In 2010 an estimated 224 000 people in Australia lived with chronic hepatitis C virus (HCV), with another 9700 anticipated annual infections. Pattern differentiation (PD), an integral aspect of traditional Chinese medicine (TCM) differentiates biomedical diseases into patterns. PD is used to diagnose, direct the treatment principle and determine treatment protocol. The aim of this study was to determine whether acupuncture could improve health outcomes of people with HCV. **Methods:** Hepatitis TCM patterns and associated symptoms/signs were identified from TCM literature. Sixteen HCV participants were enrolled in a randomised, controlled pilot study and allocated to an acupuncture treatment or sham acupuncture control group. Each participant was assessed against these patterns (symptom/signs) at baseline and on completion (week 12) using an innovative methodology which allowed evaluation. **Results:** Seventeen patterns were identified with participants expressing both different and multiple patterns. Three major patterns expressed group aggregate mean percentages of; Liver yin vacuity 47.2%, binding depression of Liver qi 46.9% and Liver Kidney yin vacuity 45.1%. Further sub-category sex grouping revealed ranking changes; Liver yin vacuity (male = 43.4%; female = 51.92%), binding depression of Liver qi (male = 51.6%; female = 42.86%) and Liver Kidney yin

vacuity (male = 46.4%; female = 48.96%). There was a significant mean percentage decrease in pattern expression at week 12 compared to baseline for the secondary and tertiary patterns for the acupuncture treatment group (56.3% versus 47.5%; $p = 0.045$ and 48.1% versus 33.6%; $p = 0.037$, respectively). No significant change was found for the major patterns of the control group or for the treatment group's primary pattern. Conclusion: The quantification of patterns of a HCV sample group allowed the identification of HCV patterns within this study group and the evaluation of treatment outcomes.

Accidents do happen! A discussion of acupuncture incident and adverse effect reporting in New Zealand

By Kate Roberts (New Zealand School of Acupuncture and TCM)

Aims: This paper aims to raise awareness among practitioners, and other health related professionals, of the incident reporting for acupuncture-related adverse treatment effects. It provides a chance to reflect on potential safety issues within clinical practice and identify chances to improve reporting systems. **Methods:** A five-year retrospective analysis of incident reporting via the main compensation provider in New Zealand (ACC) was conducted. In addition to this, a report of clinical incidents from the largest education provider of acupuncture in New Zealand was undertaken. **Discussion:** Between the years of 2006 and 2010 a total of 27 acupuncture-related treatment injuries have been reported to the key insurance body in NZ, ACC. This included three wound infections and a pneumothorax which was also lodged as a complaint to the Health and Disability Commission. In the same time period, at the largest TCM training institution in New Zealand, four clinical incidents resulting in injury have been lodged to administration. These included two burns, one fainting episode and one pneumothorax. In addition to this there were various complaints regarding safe needle disposal. There is currently no official system of data collection within the professional acupuncture bodies in New Zealand but self-reporting is encouraged. **Conclusion:** While the rate of incident and adverse effects from acupuncture is minimal, there are still preventable injuries occurring in clinical practice. A more consistent and transparent system of reporting could lead to identification of areas for continuing education for practitioners and highlight areas for education providers to focus on.

From the classical to the modern: views on the efficacy and safety of Chinese herbal medicine

By Hong Xu (Victoria University)

Background: The safety and efficacy of Chinese herbal medicine have been lengthily examined, and a system of theory and practice has been established and developed gradually in the past thousands of years through life and clinical practice. The further development in safety and efficacy has never stopped and

is progressing rapidly in the modern world, assisted by modern scientific methods. **Objectives:** The herbal bioactive elements and levels of toxicities are two of the important aspects. **Main results:** The concentrations of elements determined by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and Atomic Absorption Spectrometry (AAS) indicated that herbs which were traditionally used for invigorating blood and modernly used for benefiting coronary and vascular disease, e.g. *Tian Ma (Rhizoma Gastrodiae Elatae)* and *Shan Zha (Fructus Crataegi)* contain a relatively higher dosage of Lanthanum (La); herbs which were traditionally used for detoxifying and modernly used for benefiting immune function, e.g. *Jim Yin Hua (Flos Lonicerae Japonicae)* and *Bai Hua She She Cao (Herba Hedyotis Diffusae)*, contain a relatively higher dosage of Selenium (Se). Acute liver toxin studies in rats indicated that herbs/foods which were traditionally used for benefiting liver function could be used for reducing liver damage, e.g. *Wu Hua Guo (Ficus carica)*. However, some herbs which were not listed in the traditional category of toxicity could cause acute liver damage. **Conclusion:** Modern studies demonstrated the objective evidence of the established therapeutic effects, explored the direction of pharmaceutical development and advanced the views of safety use of herbs. Herbal toxicity and methods of formulation in reducing potential side effects need to be further studied and developed.

No Roots, No Fruits: the importance of the classics in modern times

By Peter Firebrace

Background: As Chinese medicine enters a new phase of international growth and is transplanted into very different soils, the integrity of the plant itself is key to its flourishing. Without roots, there will be no shoots, no flowers and no fruits, reducing Chinese medicine to a parody of itself, decreasing its effectiveness and preparing for its inevitable decline. With strong roots, the plant will take on a new lease of life, of vigorous growth and development, a true embodiment of the long life vision of the ancient practitioners and writers. **Objectives:** To show how the Chinese philosophical and medical classics, written in another time and another culture, have not only historical relevance for us today, but present and preserve key concepts that are essential to the practice and survival of Chinese medicine in our modern world. **Method:** Analysis of the essential concepts of Chinese medicine that form the basis of a different perception of health and disease to Western medicine. This perspective is set out in the philosophical classics such as the *Laozi* and *Zhuangzi*, in the medical classics such as the *Neijing* and *Nanjing*, the *Jiayijing* and *Zhenjiu Dacheng*, in the *Yang Sheng* Nourishing Life and *Neidan* Inner Alchemy traditions, and in the contributions from such giants as Hua Tuo, Sun Simiao and Li Shizhen. **Results:** Chinese medicine stands at a crossroads. Its deep roots in the classics have shaped the Chinese medicine we practise

today, but in the search for acceptance and the pressures to conform to the dominant paradigm of the Western medical model in the modern world, this deep-seated foundation is at risk of neglect and degradation. As practitioners and educators its future lies in our hands. The heritage we received is ours to pass on in turn, adapted to modern times, enhanced, and not degraded. Conclusions: So many bright minds down the centuries have shared their thoughts in texts, commentaries, images, body maps and diagrams, all with one aim in mind – to preserve health and prevent disease. While going forward into new times and new places, Chinese medicine needs to preserve its roots or lose its effectiveness and its unique identity.

‘Does it really matter?’: students’ perception of the *Huang Di Neijing Suwen*

By Kate Roberts (New Zealand School of Acupuncture and TCM)

Purpose: Discussion of the *Neijing Suwen* (Yellow Emperors Classic) has formed part of the NZSATCM BHSci (Acup) fourth year curriculum since its inception in 2008. Discussion tutorials based on selected chapters form the basis of delivery for this subject. This paper aims to investigate students’ perception of the relevance of this classic to clinical practice and to gauge their understanding of the concepts included within the text. **Methods:** Email questionnaires were sent to the 2013 and 2012 cohort of fourth year students to gauge interest in discussing the topic area and to ascertain any initial themes for discussion. Following this a focus group was held and, using a semi structured format, students were asked to discuss highlights in their understanding during their study of the classic. Data was analysed using thematic analysis. **Results:** Thematic analysis brought out the overarching theme that students used this text to place their learning into a historical perspective. Students stated that the text ‘puts theory into perspective’ and creates ‘a connection to the past’. The focus group further identified specific aspects students valued including ‘macrocosmic influences matter’ and the purpose of ‘seeking ideal practice’ illustrating how this classical text influenced clinical practice. **Conclusion:** The findings from this paper showed how students benefited from the inclusion of the study of the *Neijing* during their fourth year of study. The Classic supported their theoretical understanding of acupuncture and the holistic nature of TCM.

Swimming in the mainstream: the growth of acupuncture and Chinese medicine in New Zealand

By Paddy McBride (New Zealand Register of Acupuncturists)

Since the New Zealand Register of Acupuncturists was founded in 1977, the practice of acupuncture and Chinese medicine has come a very long way. The first meeting was attended by eight practitioners – we now have more than 500 members throughout the country. In 1977 it was not possible to study acupuncture in

New Zealand – the first practitioners all had to travel overseas in their quest for knowledge. Acupuncture is now offered as a Bachelor Degree recognised by the New Zealand Qualifications Authority. A study of general practitioners in 2006, published in the *New Zealand Medical Journal*, ascertained that the majority considered acupuncture to be mainstream medicine. We don’t believe that we are yet as mainstream as we would like to be but there is no doubt we are making great progress. The general public of New Zealand are beginning to embrace both acupuncture and Chinese herbal medicine. New Zealand’s Accident Compensation Commission has accepted members of NZRA as treatment providers since 1990. Every year more people access acupuncture treatment to assist in their recovery from accidental injury. Once they have experienced how effective it can be, they invariably return to the clinics for treatment of other conditions. With the growing ethnic Chinese population, particularly in Auckland and to a lesser extent, Christchurch, New Zealanders are being exposed to more and more of the Chinese culture generally. What was once so very foreign is rapidly becoming mainstream.

The effect of acupuncture treatment compared to sham laser for lateral elbow pain: a randomised controlled pilot study

By Christine Berle (University of Technology Sydney); Chris Zaslowski; Deirdre Cobbin; Peter Meier; Sean Walsh; Seong Leang Cheah

Background: Lateral elbow pain is a common painful musculoskeletal condition affecting approximately 1–3% of the population. **Methods:** A randomised participant-blinded controlled pilot study was undertaken to determine whether acupuncture could relieve pain and improve function for this condition. Twenty participants were randomly allocated to either a standardised acupuncture protocol ($n = 11$) or sham laser ($n = 9$) over ten sessions. Outcome measures were PPT test, McGill/Melzac pain, DASH and VAS pain questionnaires. Participants were evaluated at baseline, on completion of treatment (week five) and one month later. **Results:** There was no significant difference between the groups at baseline for any outcome parameter. There were no significant changes found at completion or one month follow-up for the PPT and VAS measures. There were significant improvements for the acupuncture group for the McGill questionnaire at week five for the affective ($p = 0.01$) and miscellaneous ($p = 0.02$) sections; week nine total score ($p < 0.03$), affective ($p = 0.01$) and miscellaneous ($p = 0.01$) sections; the DASH at week five for work ($p = 0.02$) and sport ($p = 0.01$) modules and week nine general ($p < 0.04$), work ($p = 0.01$) and sport ($p = 0.006$) modules. There were no significant changes for any outcome measure for the control group. There was no significant difference found between the two groups for blinding efficacy (expectancy/credibility scale) and experience of *deqi* at baseline or on completion. **Conclusion:** Results indicate that acupuncture may be helpful in alleviating pain and improving

arm functionality, but small participant numbers preclude any definitive conclusions, a larger sufficiently powered study is required.

The practice of acupuncture and moxibustion to promote cephalic version for women with a breech presentation: implications for clinical practice and research

By Caroline Smith (CompleMED, University of Western Sydney); Debra Betts

Objective: To examine what expert acupuncture practitioners and researchers considered key aspects of treatment to promote cephalic version, and to establish a protocol through consensus to guide an effective and safe treatment protocol for the self-administration of moxa by pregnant women. Method: The Delphi method was used to seek the opinions of key informants. Sixteen English-speaking international, Australian and New Zealand acupuncturists working in the area of pregnancy were invited to participate in the study. Result: Two rounds of the Delphi process were undertaken, 12 participants completed round one, and 10 completed round two. Safety was identified as an important factor in relation to the expectant mother and her baby. Eighty per cent of participants agreed that moxa should commence between 34 and 35 weeks. Ninety per cent agreed to self-administration of moxa by the woman, and use of smokeless and odourless sticks. Seventy per cent agreed moxa should be applied for a minimum of ten days, and should be applied once a day for 30 minutes. Ninety per cent agreed study clinical outcomes should assess side effects including burns, and maternal and foetal outcomes. Conclusion: The findings from our study demonstrate the clinical validity for our future research protocol, and highlight other areas for research to evaluate the role of acupuncture and moxibustion with normalising birth.

From clinical practice to clinical trial: the development of a clinical trial protocol for period pain

By Mike Armour (University of Western Sydney)

Objectives: Many clinical trials of acupuncture do not capture the complexity of how traditional Chinese medicine (TCM) is practised in the community. We aimed to use the knowledge of experienced clinical practitioners to develop a clinical trial protocol for treating period pain that reflects a balance between research and practice. Methods: An online and postal survey of all registered acupuncture practitioners in Australia and New Zealand was undertaken to provide broad information on the scope of clinical practice. European and Chinese trained practitioners from NZ and Australia who either identified as experienced practitioners in the women's health survey, or were identified due to their clinical experience in women's health, were invited to take part in focus groups and interviews. Written data on pattern discrimination and point usage was also collected. Data was analysed using quantitative methods and thematic analysis to provide a rich

data set. Results: Nineteen practitioners (11 New Zealand, eight Australian) contributed information on important treatment components (such as lifestyle advice, treatment timing, treatment frequency and needle stimulation), important acupuncture points and key patterns of disharmony for period pain. Conclusions: Community based, clinically experienced practitioners provided a diverse perspective on key aspects of clinical treatment of period pain with acupuncture. This information was used to develop a manualised acupuncture protocol for an upcoming randomised controlled trial on acupuncture for period pain.

Development of a novel questionnaire for the TCM pattern diagnosis of stress

By Shuai Zheng (University of Technology, Sydney); Peter Meier; Chris Zaslowski

Background: The term 'stress' is a common diagnosis used by both patients and practitioners alike to describe a 'condition' generally regarded as subjective in nature. That is, each individual will report varying somatic or cognitive symptoms. Currently there are no definitive diagnoses or signs and symptoms for 'stress' for both biomedicine and traditional Chinese medicine (TCM). Method: Signs and symptoms for General Anxiety Disorder and commonly reported signs and symptoms for stress were cross referenced against modern TCM textbooks to relate each sign and symptom to possible patterns (*zheng*) and then cross referenced again against the signs and symptoms list to form two gender specific questionnaires. Pattern identification measurement is based on percentile rank of signs and symptoms present against possible number of signs and symptom per pattern for each gender. The questionnaires were administered at two separate time intervals on the same day to 20 participants ($n = 10$ male, $n = 10$ female) who identified themselves as stressed. Test-retest reliability and the most frequently scored patterns were then calculated. Results: Test-retest analysis found that the Pearson's correlation for females was 0.84 while for males it was 0.85. In addition the most common patterns reported were heart blood deficiency, heart qi deficiency and liver blood deficiency. Conclusion: Findings from this preliminary study show potential for this instrument as a novel diagnostic tool for the identification of the patterns associated with stress.

Evaluation of auricular points treatment for obstructive sleep apnoea

Chao-Nan Yang (Chang Bing Show Chwan An Memorial Hospital); Pei-Shan Hung; Cheng-Yu Wei; Dauw-Song Zhu; Jiawei Zhang

Background: Obstructive sleep apnoea (OSA) is one of the most common and disruptive sleep disorders. OSA has causal relationships with many diseases, such as stroke, hypertension, coronary artery disease and obesity related metabolic diseases. The treatment methods in Western medicine

include conservative treatment, continuous positive airway pressure, oral devices and surgery. In traditional Chinese medicine (TCM), Chinese herbal medicine and acupuncture treatment are the mainstream, but some people are afraid of acupuncture or dislike the bitterness of herbal medicine. Therefore, auricular points treatment might be a third option in TCM. Objective: To study the clinical effect of auricular therapy on OSA, and to find out the constitution of TCM syndrome classification statistics of OSA patients. Methods: The patients were randomly divided into two groups, with 30 cases in the treatment group treated with auricular point sticking and pressing beads and 30 cases in the control group treated with auricular point sticking plaster pressure. The two groups were treated at the same auricular point, once per week. Both groups received one course in total, with two weeks per course. Before treatment two groups filled in sleep questionnaires and TCM constitution assessments; before and after treatment they received monitoring of polysomnography. Results: Comparing the respiratory disturbance index (AHI) before and after treatment, significant differences could be seen in both groups ($P < 0.01$ in treatment group, $P < 0.05$ in control group). Comparing the snore index before and after treatment, significant differences could be seen in both groups ($P < 0.01$). Conclusion: In patients with OSA, constitution types are mainly qi deficiency and phlegm dampness constitution. Auricular therapy can effectively improve AHI and snore index in OSA patients.

Building community trust and protecting public safety: the Australian national registration of Chinese medicine practitioners

By Charlie C Xue (Chinese Medicine Board of Australia)

Background: In 2008 the Council of Australian Governments (COAG) decided to establish a single National Registration and Accreditation Scheme (the National Scheme) for ten health professions. A further four health professions joined the scheme from 1 July 2012, including Chinese medicine. Prior to this, regulation of Chinese medicine practitioners was in place in the state of Victoria only. The National Scheme was established under the *Health Practitioner Regulation National Law Act 2009* (the National Law). There is a National Board for each of the 14 regulated health professions. The Australian Health Practitioner Regulation Agency (AHPRA) is the single agency that supports the National Boards and the National Scheme. Objectives: The role of the Board is to protect the public and set standards and policies that registered Chinese Medicine practitioners must meet. To be registered a practitioner must meet all the Board's registration standards including: criminal history checks; continuing professional development; professional indemnity insurance; recency of practice; English language skills; and grandparenting and general registration eligibility.

Other functions of the Board include: handling notifications; assessing overseas trained practitioners who wish to practise in Australia; and approving accreditation standards and accredited courses of study. The presentation will provide a comprehensive update on the regulation of the profession and the progress of the Chinese Medicine Board of Australia. Main results: By June 2013, there were 4070 registered Chinese medicine practitioners in Australia. New South Wales hosts the largest registrant base with 40.52%, followed by Victoria (28.28%) and Queensland (19.29%). Much has been learnt to date. Besides the common challenges, several unique issues such as language, qualification, as well as transitions of legal issues from the former Chinese Medicine Registration Board of Victoria, that the Board has given priority to ensure timely implementation of the practitioner registration process. Conclusion: National registration of the Chinese medicine profession is a landmark development in Australia and the Western developed world.

The effects of acupuncture on mucosal immunity in perennial allergic rhinitis: a randomised, subject-and-assessor-blinded, sham-controlled clinical trial

By John McDonald (Griffith University); Allan Cripps; Peter Smith; Caroline Smith; Charlie Xue; Brenda Golianu

Between 2009 and 2012, 148 adults with perennial allergic rhinitis were recruited and randomised into three groups: real acupuncture, sham acupuncture and no acupuncture. Objectives: The primary objective of the trial was to measure any changes in mucosal immunity after acupuncture, specifically any modulation of pro-inflammatory neuropeptides (SP, VIP & CGRP), any modulation of neurotrophins (NGF & BDNF), and any shift in Th1/Th2 cytokine balance. Secondary outcomes included clinical measures and self-assessment tools such as the Mini rhinoconjunctivitis quality of life questionnaire [MiniRQLQ]. Methods: The real and sham acupuncture groups received acupuncture treatments twice weekly for eight weeks. All groups were assessed by an allergy specialist at baseline and at one and four weeks follow-up. Peripheral venous blood was collected at baseline and four weeks follow-up, and saliva samples were collected at several time-points. Data are presented as mean and standard error of mean. Results: No significant differences were seen in levels of SP, VIP, CGRP, NGF, BDNF or cytokines four weeks after acupuncture treatment. However significant down-regulation in salivary SP was seen 18 to 24 hours after acupuncture (101.09 ± 26.49 pg/ml) compared to pre-treatment (517.95 ± 383.56 pg/ml) ($p = 0.040$). Significant improvements in clinical symptom scores were seen in the real acupuncture group after the first two weeks of acupuncture treatment (Week 1 – 23.27 ± 2.68 ; Week 3 – 20.33 ± 2.98) ($p = 0.023$) and these improvements persisted

for four weeks after treatment (Week 12 – 17.60+3.37) ($p = 0.003$). Conclusions: Acupuncture is effective in alleviating symptoms of allergic rhinitis however modulation of neurotrophins, pro-inflammatory neuropeptides and cytokines does not appear to account for this clinical improvement.

The Chinese Medicine Board of Australia's policy on infection prevention and control for acupuncture practice

By Stephen Janz (Chinese Medicine Board of Australia)

Background: The prevention and control of infection is a key professional responsibility of the acupuncture practitioner. In keeping with its primary objective of protecting public health and safety the Chinese Medicine Board of Australia (the Board) has developed Infection prevention and control guidelines for acupuncture practice (the Guidelines). The guidelines are in addition to the NHMRC Australian guidelines for prevention and control of infection in healthcare (the Australian guidelines) which the Board has adopted. The Board's guidelines highlight key features of the Australian guidelines; clarify acupuncture specific areas which are not clearly addressed in the Australian guidelines; and provide emphasis and clarification specific to controlling the risk of infection in acupuncture practice. **Aim:** The CMBA Guidelines aim to identify specific requirements for the prevention and control of infections in acupuncture practice that are not covered in the Australian Guidelines. The development of the CMBA guidelines take a risk management approach consistent with Australian guidelines and are based upon the best available evidence. **Method:** The Australian guidelines were examined by the Board to identify areas which required further acupuncture specific guidance. A literature search was then conducted using the State Library of Queensland online search tool and Google using the keywords 'acupuncture' 'infection' 'prevention' 'control'. Limited acupuncture specific infection control literature was identified and one evidence based set of guidelines was found. A further search was conducted for evidence based guidelines for established procedures with a similar procedural risk profile to acupuncture. NHMRC immunisation guidelines and WHO guide to best practice for injections and related procedures were identified. Draft guidelines were developed by the Policies, Standards and Guidelines Advisory Committee (the Policy Committee) based upon the identified evidence based guidelines, revised and approved by the Board for stakeholder consultation. Stakeholder feedback was reviewed prior to finalising the document. **Results:** Additional guidelines have been developed concerning hand hygiene and the use of alcohol based hand rub; single use of critical items such as acupuncture needles and bamboo cups; appropriate use of gloves; routine skin preparation and post treatment procedures; non-sharp waste disposal; and the prevention and management of sharps injuries. **Conclusion:** The Guidelines

are published on the Chinese Medicine Board of Australia website (www.chinesemedicineboard.com.au) and apply to all Chinese medicine practitioners registered in the division of acupuncture. The Guidelines may be of interest to other health professionals, educators, and regulators concerned with acupuncture practice.

Physiological activities elicited by acupuncture and its sham device in humans and rats

By Kenji Kawakita (Meiji University of Integrative Medicine); Kaoru Okada; Maria Carneiro; Eiji Sumiya; Chie Ogasawara; Yukihito Sugawara; Shigekatsu Aizawa; Syuji Goto

Objective: The purpose of this study was to evaluate the physiological activities of various sham interventions used in recent clinical trials of acupuncture. Such interventions were assumed to be inert. **Methods:** Neural activities elicited by various acupuncture stimuli, including acupuncture manipulation, press tack needle (PTN), and sham acupuncture stimuli, were recorded electrophysiologically from the afferent fibres in humans and pain-related neurons and/or reward-related nuclei in the rat's central nervous systems. Peripheral nociceptors were classified into C mechano-heat (CMH) units and A mechano-sensitive (AH) units in humans, and central neurons were classified into nociceptive specific (NS) and wide dynamic range (WDR) neurons based on their responsiveness to mechanical and thermal stimuli in rats. The protocols of both experiments were approved by the ethical committee of our university. **Results:** In humans, all CMH ($n = 10$) units were activated by real acupuncture, PTN and various sham interventions, but not by sham PTN. In rats, acupuncture manipulation including real PTN activated the NS neurons in the periaqueductal grey matter (PAG, $n = 5$) and the nucleus accumbens (major nucleus for rewarding system, $n = 4$). No response was elicited by sham PTN. **Conclusion:** Various sham interventions used in the published clinical trials could activate the CMH units, presumably C polymodal receptors in human. Only sham PTN could be considered an inert intervention in humans and rats. Real and sham PTN might be useful for future clinical trials of acupuncture.

An innovative approach to individualised acupuncture treatment: preliminary findings of a study on individual variations in endogenous pain controls

By Zhen Zheng (RMIT University); Kelun Wang; Dongyuan Yao; Charlie CL Xue; Genevieve Iversen; Lars Arendt-Nielsen

Introduction: A painful stimulation applied to one site of the body inhibits pain at a distant part. This is called conditioned pain modulation (CPM). The same painful stimulation inhibits pain at or close to the site of stimulation, which is labelled as segmental inhibition (SI). Such controls have been shown to partially explain acupuncture analgesia. **Aim:** This study aims to

investigate if there were individual variations in potency of CPM and SI; and if such variations were association with individual response to acupuncture. This abstract reports the preliminary findings. Methods: Forty-one healthy humans were recruited to undertake a cold pressor test, which reliably produces CPM and SI. Subjects were asked to put their left hand in icy water (1–4°C) for five minutes. Pressure pain thresholds (PPT) were measured on the bilateral forearms and right leg before, during and 20 minutes after cold pressor. Rating to cold pressor pain was recorded at 2Hz during the five minutes using an electronic Visual Analogue Scale. Thirteen out of forty one subjects then had real or sham acupuncture treatment to left LI10 and LI4 for 20 minutes in a random order on different days with one week apart. PPT was measured before, immediately and 30 minutes after acupuncture. Individual variations in CPM and SI were identified. Analysis of variance was then used to analyse the interaction between individual differences in potency of CPM and SI and their response to real and sham acupuncture. Results: During cold pressor, one group of subjects ($n = 16$) reported increased then decreased pain at two minutes after immersing the hand in icy water (pain adaptive group); whereas the other group ($n = 25$) reported increased then stabilised pain response (pain non-adaptive group). There was no difference between the two groups in CPM, but pain adaptive group had more potent and long-lasting SI than the pain non-adaptive group ($p < 0.05$). There was no difference between real and sham acupuncture on PPT changes. There was group difference in their response to acupuncture on PPT measured at where acupuncture was (group by type of acupuncture by time interaction $p = 0.009$). That is in pain adaptive group, there was no difference between analgesia induced by real and sham acupuncture. In pain non-adaptive group, real acupuncture increased PPT for a short period, and the effect did not last more than 20 minutes; but sham acupuncture induced better analgesia at 20 minutes after acupuncture. Conclusion: Our preliminary findings indicate that adaptability to pain and potency of SI are perhaps important contributing factors to individual response to real and sham acupuncture. Studies with a larger sample size are required to confirm the finding.

How we treat women's health: The results of the 2012 Australian and New Zealand Women's Health Practitioner Survey

By Mike Armour (University of Western Sydney); Caroline Smith; Debra Betts

Objectives: Surveys from the United Kingdom and Europe report that treating women's health is a popular area of clinical practice. However, there is little data describing the characteristics of acupuncture practice in Australia and New Zealand. The aim of this study was to investigate the practice of acupuncture for women's health. Methods: An online or paper survey was distributed via email or post to all 3 498 active members of major professional acupuncture bodies in Australia

and New Zealand. Data was collected on the treatment of each subsection of women's health: menstrual, fertility and pregnancy related conditions. Commonly treated biomedical diagnosis, the interventions used and information on referral networks were collected for each subsection. Demographic data and practice characteristics were also collected. Results: 377 practitioners responded (10.7%) to the survey. Ninety six per cent reported they had treated women's health conditions in the past year. Of those practitioners who treated women's health, 97 per cent had treated menstrual conditions, the most common conditions included pre-menstrual syndrome (90%), menopause (89.5%) and primary dysmenorrhea (89%). Ninety per cent treated fertility including general fertility health (93%), fertility related stress (86%) and as an adjunct to biomedical treatment (85%). Ninety one per cent treated pregnancy with common conditions including nausea (92%), back and hip pain (92%) and birth preparation (89%). Conclusions: Acupuncturists in New Zealand and Australia treat a wide range of women's health conditions using a variety of treatment interventions.

From apprenticeship to the classroom: the teaching of TCM hand skills – an exploratory protocol

By Suzanne Cochrane (University of Western Sydney)

Background: The transformation of Chinese medicine education in the last century has been from a set of knowledge and skills transmitted by senior experienced doctors to a small number of students or apprentices, who observe and participate in their clinical practice, to a classroom based university setting graduating multiple doctors to service a different and demanding health care system. It would be expected that manual or hand skills would suffer most in these changes as the opportunity for observation and daily practice is more limited. There has been little examination of what teaching methods are used in TCM classrooms for transmitting hand skills nor of the impact of classroom based teaching on student skill levels. An exploratory research project that begins this examination has been initiated and will be completed in 2014. Objective: To examine teaching methods for practical hand skills in TCM educational institutes. Method: The first stage focuses on observation of classroom teaching of hand skills in relation to pulse diagnosis and acupuncture needle manipulation in three Chinese TCM universities using videorecordings of a real time class. The resulting videos are to be analysed for teaching methods used and a textual analysis done of the teacher's contribution to the class and the teaching techniques they used. Results and Conclusion: The results will be contrasted with contemporary teaching in Western TCM educational institutions. Future research could include more comparative data on actual skills in the TCM trained Chinese and Western student; the balance of skills-training that happens in clinical settings compared to classrooms (and whether this matters); and perhaps a contrast of the apprenticeship trained practitioners with their classroom trained peers.