Heterogeneity in search strategies among Cochrane acupuncture reviews: is there room for improvement?

Steve Lui, Erica J Smith and Mishka Terplan

Acupunct Med published online June 28, 2010
doi: 10.1136/aim.2010.002444

Acupuncture in Medicine Publish Ahead of Print, published on June 28, 2010 as doi:10.1136/aim.2010.002444

Heterogeneity in search strategies among Cochrane acupuncture reviews: is there room for improvement?

Steve Lui,[1] Erica J Smith,[2] Mishka Terplan[3]

[1]Department of Nursing and Health Studies, Centre for Health and Social Care, University of Huddersfield, Queensgate, Huddersfield, West Yorkshire, UK
[2]Division of Research and Optimal Patient Care, American College of Surgeons, Chicago, Illinois, USA
[3]Department of Obstetrics, Gynecology and Reproductive Sciences, The University of Maryland School of Medicine, Baltimore, Maryland, USA

Correspondence to
Mr Steve Lui, Department of Nursing and Health Studies, Centre for Health and Social Care, University of Huddersfield, Queensgate, Huddersfield, West Yorkshire HD1 3DH, UK; s.lui@hud.ac.uk

Accepted 9 April 2010

Abstract

Objective Given the international focus and rigorous literature searches employed in Cochrane systematic reviews, this study was undertaken to evaluate strategies employed in Cochrane reviews and protocols assessing acupuncture as a primary or secondary intervention.

Methods The Cochrane Collaboration of systematic reviews was searched in February 2009 for all reviews and protocols including information on acupuncture. Information was abstracted from all retrieved articles on review status, type and number of English and Chinese language databases searched, participation of at least one Chinese speaking author and language restriction. Frequencies were calculated and bivariate analyses were performed stratifying on interventions of interest to assess differences in search strategy techniques, language restrictions and results.

Results The search retrieved 68 titles, including 48 completed reviews, 17 protocols and three previously withdrawn titles. Acupuncture was the primary intervention of interest in 44/65 (67.7%) of the retrieved reviews and protocols. While all articles searched at least one English language database, only 26/65 (40.0%) articles searched Chinese language databases. Significantly more articles where acupuncture was the primary intervention of interest searched Chinese language databases (53% vs 9%, $p<0.01$). Inconclusive findings as to the effectiveness of acupuncture were found in 28/48 (58.3%) of all completed reviews; this type of finding was more common in reviews which did not search any Chinese language databases.

Conclusions It is important for reviews assessing the effectiveness of acupuncture to search Chinese language databases. The Cochrane Collaboration should develop specific criteria for Chinese language search strategies to ensure the continued publication of high-quality reviews.

INTRODUCTION

Acupuncture consists of the application of needles (as well as pressure and heat) to certain points on the body. Although it has been part of traditional Chinese medicine for centuries,[1] it has only recently entered into practice in the West. English language clinical descriptions of acupuncture first appeared in Medline in the 1950s. The first randomised trials on acupuncture were not published until the 1970s with the volume of scientific studies increasing since (figure 1).

The Cochrane Collaboration is an international organisation whose primary aim is to assist healthcare providers, consumers, researchers and policy makers in navigating the often unmanageable amounts of healthcare information by synthesising the evidence within systematic review frameworks. At its core is the collection of Cochrane reviews, a database that contain high-quality, independent evidence to inform healthcare decision-making.[2] Cochrane reviews are thought to represent the highest level of evidence on which to base clinical treatment decisions because they are 'doubly peer reviewed' and also because of the exhaustive and transparent search criteria employed for reviews.[3]

The objective of this study was to systematically evaluate strategies employed by Cochrane authors in reviews containing acupuncture as an intervention. Given Cochrane's international focus and the rigorous literature searches employed in the generation of its systematic reviews, we were particularly interested in whether authors had consulted Chinese language databases or had authors fluent in Chinese.

METHODS

The Cochrane Collaboration website (http://www.cochrane.org) was searched in February 2009 using the search term 'acupuncture' to identify all publications relating to, and containing, any trials on acupuncture.

A data extraction database was developed to capture key methodological and author information for each of the reviews and protocols identified in the search. Key factors of review status (protocol vs completed review), type and number of English and Chinese databases searched, participation of at least one Chinese speaking author, stated translation of foreign language abstracts and language restriction were abstracted. An article was determined to have a Chinese speaking author if it had at least one author with residence in Chinese speaking country or if the review stated that one author reads Chinese. A review was determined to have a language restriction if the authors stated that there was a language restriction or (in the absence of a stated language restriction) there were no non-English articles included in the literature search. Additionally, information as to whether acupuncture was the primary or secondary intervention as well as the outcome and review findings were abstracted.

Frequencies and proportions were calculated to determine method characteristics of retrieved reviews and protocols. Bivariate analyses were performed stratifying on interventions of interest to assess differences in search strategy techniques and language restrictions. Stratification on the use of Chinese language databases in the search strategy was used to assess differences in acupuncture effectiveness findings. When appropriate, χ^2 tests with a two-sided p value of <0.05 were used to determine statistical significance between proportions in

group. All analyses were performed by using STATA 10.0 (College Station, Texas, USA).

RESULTS

The key word search of the Cochrane website retrieved 68 publications relating to acupuncture, three of which had been previously withdrawn.[4–6] Therefore the analysis includes 65 Cochrane publications: 48 completed reviews[7–54] and 17 protocols [55–70] (figure 2). Acupuncture was the primary intervention of interest in nearly two-thirds (n=45) of the retrieved reviews and protocols.

The number of reviews and protocols assessing the effectiveness of acupuncture on various diseases and conditions has increased in the past 10 years, hitting a peak in 2006–7, when 19 reviews and protocols were published. (table 1) The number of reviews including trials with acupuncture as a secondary intervention has also increased over the past 10 years, with nine reviews including trials using acupuncture in 2008–9.

All publications retrieved, searched or planned to search English language databases. The majority of these reviews and protocols searched Medline (98.5%), Embase (95.4%) and CENTRAL (92.3%). Only 26 (40%) of the included reviews and protocols searched Chinese language databases. The choice of Chinese databases was not as consistent as that of English language databases. Among reviews and protocols which used Chinese databases, the China Biological Medicine database was the most searched and was used in 20 (76.9%) of included reviews and protocols. This was followed by the Traditional Chinese Medical Literature Analysis and Retrieval System and Chinese National Knowledge Infrastructure databases each of which were used in 10 (15.4%) of the reviews and protocols. Twenty-seven (41.5%) of the included articles had at least one Chinese speaking author. Two-thirds of the reviews and protocols (n=40) had the capacity or stated that they translated Chinese language abstracts to determine inclusion for the review. However, seven (10.8%) articles had a language restriction on the inclusion criteria and only reviewed English language articles (table 2).

When acupuncture was the primary intervention of interest, searching Chinese databases was more likely to be included in the search strategy (53% vs 9%, p<0.01). Having a Chinese-speaking author and translating Chinese language abstracts were also more commonly found in reviews where acupuncture was the primary intervention (p<0.01). Interestingly five (11%) reviews in which acupuncture was the primary intervention employed a language restriction (table 3).

The majority of the 48 full reviews (n=28), were inconclusive because of a lack of included studies to fully answer the research question. After stratifying on the use of Chinese databases, a greater proportion of the reviews which did not search Chinese databases were inconclusive as to the effectiveness of acupuncture (68.6% compared with 30.8%). Seven (14.6%) reviews found acupuncture to have a positive effect on the disease of interest, two (15.4%) reviews which searched Chinese databases and five (14.3%) which did not. However, 11 (22.9%) reviews found acupuncture to be not as effective as another standard treatment; this finding was more common in reviews which searched Chinese language databases than in those which did not (46.2% vs 14.3%, respectively) (table 4).

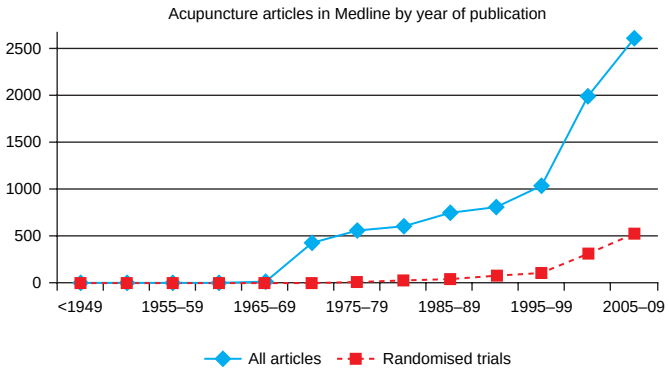

Figure 1 English language articles found in Medline searching MESH keywords: acupuncture; acupuncture, analgesia; acupuncture, ear; acupuncture points; acupuncture therapy.

DISCUSSION

Since its arrival in the USA in the 1970s, acupuncture has gained in popularity and acceptance. In recent years greater numbers of trials have been performed investigating acupuncture for a wide variety of conditions.[71] Interventions of interest in the Cochrane reviews retrieved for this study ranged from relief of headaches to muscle pain to substance abuse dependence. As scientific studies have accumulated, researchers have sought to synthesise

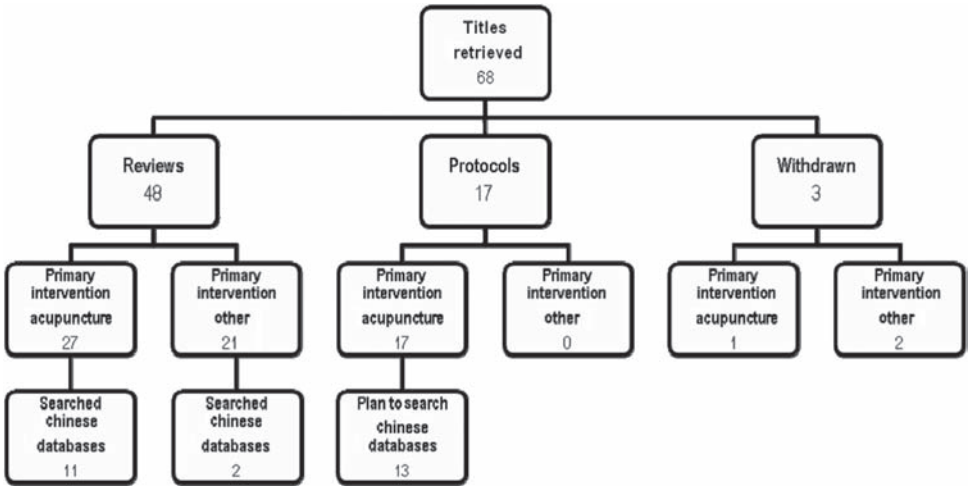

Figure 2 Flow chart of included Cochrane reviews.

Table 1 Publication years for included Cochrane reviews and protocols by intervention of interest

	Acupuncture intervention of interest (N=45)	Acupuncture secondary intervention (N=23)
1998–9	1 (2.2)	1 (4.4)
2000–1	0	1 (4.4)
2002–3	5 (11.1)	3 (13.0)
2004–5	9 (20.0)	5 (21.7)
2006–7	19 (42.2)	4 (17.4)
2008–9	11 (24.5)	9 (39.1)

Table 2 Search and author characteristics of retrieved reviews and protocols

	N (%)
Stage of review	
Review	48 (70.6)
Protocol	17 (25.0)
Withdrawn*	3 (4.4)
Acupuncture intervention of interest	44 (67.7)
English databases used	
Medline/PubMed	64 (98.5)
EMBASE	62 (95.4)
PsycInfo	10 (15.4)
CENTRAL	60 (92.3)
AMED	19 (29.2)
Use of any Chinese databases	26 (40.0)
Chinese databases used	
China Biological Medicine database	20 (30.8)
Chinese Acupuncture Trials Registry	6 (9.2)
Traditional Chinese Medical Literature Analysis and Retrieval System	10 (15.4)
Chinese National Knowledge Infrastructure	10 (15.4)
Chinese Medical Current Content	4 (6.2)
Translation of Chinese abstracts	40 (61.5)
Language restriction	7 (10.8)
Author resident in Chinese speaking country/states one author reads Chinese	27 (41.5)
Acupuncture findings of full reviews†	
Positive	7 (14.6)
Negative	11 (22.9)
Inconclusive	28 (58.3)
Null Review	2 (4.2)

*Withdrawn publication not included in proportions; †proportions based on review articles only.

Table 3 Comparison of characteristics of retrieved reviews and protocol by primary intervention of interest

	Acupuncture primary intervention	Acupuncture secondary intervention	p Value
Stage of review			
Review	27 (60.0)	21 (91.3)	<0.01
Protocol	17 (37.8)	0	
Withdrawn*	1 (2.2)	2 (8.7)	
English databases used (n)			
0	0	0	0.98
1	0	0	
2	2 (4.7)	1 (4.6)	
≥3	41 (95.3)	20 (95.4)	
Chinese databases used (n)			
0	21 (46.7)	21 (91.4)	<0.01
1	10 (22.2)	1 (4.4)	
2	8 (17.8)	0	
≥3	6 (13.3)	1 (4.4)	
Translation of Chinese abstracts	33 (75.0)	7 (33.0)	<0.01
Language restriction	5 (11.4)	2 (9.5)	0.82
Chinese speaking author	25 (55.6)	2 (8.7)	<0.01

Table 4 Acupuncture effectiveness finings in Cochrane systematic reviews

	English database used	Chinese database used	
	Yes	Yes	No
	N (%)		
Positive review	7 (14.6)	2 (15.4)	5 (14.3)
Negative review	11 (22.9)	6 (46.2)	5 (14.3)
Inconclusive review	28 (58.3)	4 (30.8)	24 (68.6)
Null review	2 (4.2)	1 (7.7)	1 (2.9)
Total	48	13	35

the data from within the framework of the Cochrane Collaboration. In order to maximise the acceptability and decrease heterogeneity of these reviews for the wide range of conditions, standardised literature search guidelines should be developed.

Acupuncture differs from other healthcare interventions in that it has an extensive history of research and practice outside of the West. Thus it might be argued that the incorporation of Chinese literature especially is key to assessing its effectiveness. However, we observed a large heterogeneity in the databases searched and the incorporation of Chinese language expertise in Cochrane acupuncture reviews. Nearly half of the reviews specifically assessing acupuncture as the primary intervention did not search Chinese language databases. This is concerning as the neglect of Chinese language literature introduces a bias into the systematic reviews as shown by the observation that reviews that did not include Chinese databases were more likely to be inconclusive. Inconclusive reviews may occur because of conflicting data in the literature or because not enough articles are retrieved during the literature search to reach conclusive conclusions. In the case of acupuncture reviews, not searching Chinese databases may substantially limit the number of abstracts retrieved during the literature search. It is therefore not surprising that reviews which did not search Chinese language databases were more likely to have inconclusive results.

It was, however, not the purpose of our paper to comment on the effectiveness of acupuncture. Rather we wished to investigate the consistency of the literature search and data synthesis in production of Cochrane reviews relating to acupuncture. As the mission of the Cochrane Collaboration is to perform systematic reviews, it has set up criteria and guidelines for all Cochrane authors to follow. These guidelines include everything from how to define research questions to transparent search strategies to methods for analysing results. Lack of adherence to *Cochrane Handbook* guidelines for search strategies has been previously described[72] and may explain some of the heterogeneity we observed. However, given the international focus of the Cochrane Collaboration especially, the proportion of English language only acupuncture reviews is surprising. Searching English language databases only may limit the number of trials retrieved for inclusion in systematic reviews.[2]

The limitations of this study must be acknowledged. Many reviews did not explicitly comment on language restrictions in their search strategy. Although we assumed that reviews that did not incorporate Chinese databases had employed a language restriction, it is possible that some non-English articles were retrieved in their search that were translated. We therefore might have overestimated the proportion of reviews with a language restriction. The results for which databases were searched, however, are unlikely to have been misclassified. This study did not capture the number of articles included in each of the reviews retrieved, only the conclusions. While the results are important, future studies should assess the association between language of literature databases searched and the number of included trials in acupuncture reviews.

In conclusion, specific criteria for Chinese and other non-English language search strategies need to be developed from within the Cochrane Collaboration to ensure the continued publication of high-quality reviews. The increasing interest in performing acupuncture-related reviews over the past 10 years makes the need for such guidelines even more pressing. In order to ensure that all of the available scientific literature is captured, systematic reviews focusing on acupuncture need to systematically search Chinese language databases as well as English databases in order to prevent the biases introduced by language and database restrictions.

Summary points

- Systematic reviews should, by definition, include studies published in all languages.
- Among Cochrane reviews of acupuncture, only 40% searched Chinese databases.
- Exclusion of Chinese studies is associated with biased conclusions.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

1. Jordan JB. Acupuncture treatment for opiate addiction: a systematic review. *J Subst Abuse Treat* 2006;30:309–14.
2. Higgins JT, Green S. *Cochrane handbook for systematic reviews of interventions*. Version 5.0.2 (updated September 2009). The Cochrane Collaboration. Wiley: Chichester, UK, 2009. Available from http://www.cochrane-handbook.org.
3. Grimes DA, Hou MY, Lopez LM, *et al.* Do clinical experts rely on the Cochrane library? *Obstet Gynecol* 2008;111(Pt 1):420–2.
4. Ejnisman B, Andreoli CV, Soares BG, *et al.* Interventions for tears of the rotator cuff in adults. *Cochrane Database Syst Rev* 2004;1:CD002758.
5. Gross A, Aker P, Goldsmith CH, *et al*. Physical medicine modalities for mechanical neck disorders. *Cochrane Database Syst Rev* 2000;2:CD000961.
6. Gadsby JG, Flowerdew MW. Transcutaneous electrical nerve stimulation and acupuncture-like transcutaneous electrical nerve stimulation for chronic low back pain. *Cochrane Database Syst Rev* 2007;1:CD000210.
7. Al-Ani MZ, Davies SJ, Gray RJ, *et al.* Stabilisation splint therapy for temporomandibular pain dysfunction syndrome. *Cochrane Database Syst Rev* 2004;1:CD002778.
8. Bausewein C, Booth S, Gysels M, *et al.* Non-pharmacological interventions for breathlessness in advanced stages of malignant and non-malignant diseases. *Cochrane Database Syst Rev* 2008;2:CD005623.
9. Brosseau L, Judd MG, Marchand S, *et al.* Transcutaneous electrical nerve stimulation (TENS) for the treatment of rheumatoid arthritis in the hand. *Cochrane Database Syst Rev* 2003;3:CD004377.
10. Casimiro L, Barnsley L, Brosseau L, *et al.* Acupuncture and electroacupuncture for the treatment of rheumatoid arthritis. *Cochrane Database Syst Rev* 2005;4:CD003788.
11. Cheong YC, Hung Yu Ng E, Ledger WL. Acupuncture and assisted conception. *Cochrane Database Syst Rev* 2008;4:CD006920.
12. Cheuk DK, Wong V. Acupuncture for epilepsy. *Cochrane Database Syst Rev* 2008;4:CD005062.
13. Cheuk DK, Yeung WF, Chung KF, *et al.* Acupuncture for insomnia. *Cochrane Database Syst Rev* 2007;3:CD005472.
14. Coyle ME, Smith CA, Peat B. Cephalic version by moxibustion for breech presentation. *Cochrane Database Syst Rev* 2005;2:CD003928.
15. Cui Y, Wang Y, Liu Z. Acupuncture for restless legs syndrome. *Cochrane Database Syst Rev* 2008;4:CD006457.
16. Dennis CL, Allen K. Interventions (other than pharmacological, psychosocial or psychological) for treating antenatal depression. *Cochrane Database Syst Rev* 2008;4:CD006795.
17. Engers A, Jellema P, Wensing M, *et al.* Individual patient education for low back pain. *Cochrane Database Syst Rev* 2008;1:CD004057.
18. Ezzo JM, Richardson MA, Vickers A, *et al.* Acupuncture-point stimulation for chemotherapy-induced nausea or vomiting. *Cochrane Database Syst Rev* 2006;2:CD002285.
19. Furlan AD, Imamura M, Dryden T, *et al.* Massage for low-back pain. *Cochrane Database Syst Rev* 2008;4:CD001929.
20. Furlan AD, van Tulder MW, Cherkin DC, *et al.* Acupuncture and dry-needling for low back pain. *Cochrane Database Syst Rev* 2005;1:CD001351.
21. Gates S, Smith LA, Foxcroft DR. Auricular acupuncture for cocaine dependence. *Cochrane Database Syst Rev* 2006;1:CD005192.
22. Glazener CM, Evans JH, Cheuk DK. Complementary and miscellaneous interventions for nocturnal enuresis in children. *Cochrane Database Syst Rev* 2005;2:CD005230.
23. Green S, Buchbinder R, Barnsley L, *et al.* Acupuncture for lateral elbow pain. *Cochrane Database Syst Rev* 2002;1:CD003527.
24. Green S, Buchbinder R, Hetrick S. Acupuncture for shoulder pain. *Cochrane Database Syst Rev* 2005;2:CD005319.
25. Haraldsson BG, Gross AR, Myers CD, *et al.* Massage for mechanical neck disorders. *Cochrane Database Syst Rev* 2006;3:CD004871.
26. Zhou M, He L, Zhou D, *et al*. Acupuncture for Bell's palsy. *J Altern Complement Med* 2009;15:759–64.
27. Khadilkar A, Odebiyi DO, Brosseau L, *et al.* Transcutaneous electrical nerve stimulation (TENS) versus placebo for chronic low-back pain. *Cochrane Database Syst Rev* 2008;4:CD003008.
28. Kwan I, Bhattacharya S, Knox F, *et al.* Conscious sedation and analgesia for oocyte retrieval during in vitro fertilisation procedures. *Cochrane Database Syst Rev* 2005;3:CD004829.
29. Law SK, Li T. Acupuncture for glaucoma. *Cochrane Database Syst Rev* 2007;4:CD006030.
30. Lee A, Fan L. Stimulation of the wrist acupuncture point P6 for preventing postoperative nausea and vomiting. *Cochrane Database Syst Rev* 2009;2:CD003281.
31. Lim B, Manheimer E, Lao L, *et al.* Acupuncture for treatment of irritable bowel syndrome. *Cochrane Database Syst Rev* 2006;4:CD005111.
32. Linde K, Allais G, Brinkhaus B, *et al.* Acupuncture for migraine prophylaxis. *Cochrane Database Syst Rev* 2009;1:CD001218.
33. Linde K, Allais G, Brinkhaus B, *et al.* Acupuncture for tension-type headache. *Cochrane Database Syst Rev* 2009;1:CD007587.
34. McCarney RW, Brinkhaus B, Lasserson TJ, *et al*. Acupuncture for chronic asthma. *Cochrane Database Syst Rev* 2004;1:CD000008.
35. O'Connor D, Marshall SC, Massy-Westropp N. Non-surgical treatment (other than steroid injection) for carpal tunnel syndrome. *Cochrane Database Syst Rev* 2003;1:CD003219.
36. Peng W, Zhao H, Zhishun L, *et al*. Acupuncture for vascular dementia. *Cochrane Database Syst Rev* 2007;2:CD004987.
37. Pennick VE, Young G. Interventions for preventing and treating pelvic and back pain in pregnancy. *Cochrane Database Syst Rev* 2007;2:CD001139.
38. Proctor M, Farquhar C. Dysmenorrhoea. *Clin Evid* 2002;(15):1639–53.
39. Rathbone J, Xia J. Acupuncture for schizophrenia. *Cochrane Database Syst Rev* 2005;4:CD005475.
40. Robb KA, Bennett MI, Johnson MI, *et al.* Transcutaneous electric nerve stimulation (TENS) for cancer pain in adults. *Cochrane Database Syst Rev* 2008;3:CD006276.
41. Smith CA, Collins CT, Cyna AM, *et al.* Complementary and alternative therapies for pain management in labour. *Cochrane Database Syst Rev* 2006;4:CD003521.
42. Smith CA, Crowther CA. Acupuncture for induction of labour. *Cochrane Database Syst Rev* 2004;1:CD002962.
43. Smith CA, Hay PP, Macpherson H. Acupuncture for depression. *Cochrane Database Syst Rev* 2010;1:CD004046.
44. Thomas LH, Cross S, Barrett J, *et al.* Treatment of urinary incontinence after stroke in adults. *Cochrane Database Syst Rev* 2008;1:CD004462.
45. Trinh KV, Graham N, Gross AR, *et al.* Acupuncture for neck disorders. *Cochrane Database Syst Rev* 2006;3:CD004870.
46. Verhagen AP, Scholten-Peeters GG, van Wijngaarden S, *et al.* Conservative treatments for whiplash. *Cochrane Database Syst Rev* 2007;2:CD003338.
47. Vlassov VV, MacLehose HG. Low level laser therapy for treating tuberculosis. *Cochrane Database Syst Rev* 2006;2:CD003490.
48. White AR, Rampes H, Campbell JL. Acupuncture and related interventions for smoking cessation. *Cochrane Database Syst Rev* 2006;1:CD000009.

49. Wu HM, Tang J, Lin XP, *et al*. Acupuncture for stroke rehabilitation. *Cochrane Database Syst Rev* 2006;3:CD004131.
50. Xie Y, Wang L, He J, *et al*. Acupuncture for dysphagia in acute stroke. *Cochrane Database Syst Rev* 2008;3:CD006076.
51. Zhang S, Liu M, Asplund K, *et al*. Acupuncture for acute stroke. *Cochrane Database Syst Rev* 2005;2:CD003317.
52. Zhu X, Proctor M, Bensoussan A, *et al*. Chinese herbal medicine for primary dysmenorrhoea. *Cochrane Database Syst Rev* 2008;2:CD005288.
53. Jewell D. Nausea and vomiting in early pregnancy. *Clin Evid* 2003;(9):1561–70.
54. Osiri M, Welch V, Brosseau L, *et al.* Transcutaneous electrical nerve stimulation for knee osteoarthritis. *Cochrane Database Syst Rev* 2000;4:CD002823.
55. Deare JC, Zheng Z, Xue CC, *et al*. Acupuncture for treating fibromyalgia. *Cochrane Database Syst Rev* 2008;2:CD007070.
56. Dodin S, Asselin G, Blanchet C, *et al*. Acupuncture for menopausal hot flushes. *Cochrane Database Syst Rev* 2008;4:CD007410.
57. Ezzo J, Hadhazy VA, Birch S, *et al*. Acupuncture for osteoarthritis of the knee: a systematic review. *Arthritis Rheum* 2001;**44**:819–25.
58. Jiaqi W, Sung L, Zhishun L, *et al*. Acupuncture for bladder dysfunction after spinal cord injury. *Cochrane Database Syst Rev* 2007;2:CD006550.
59. Liu JP, Wang J. Acupuncture for chronic hepatitis B virus infection. *Cochrane Database Syst Rev* 2005;1:CD005163.
60. Liu J, Fei Y, Alraek T. Acupuncture for treatment of erectile dysfunction. *Cochrane Database Syst Rev* 2008;3:CD007241.
61. Manheimer E, Eaton K, Lao L, *et al*. Acupuncture for the treatment of post-operative pain. *Cochrane Database Syst Rev* 2006;2:CD006042.
62. Sung L, Jiaqi W. Acupuncture for urinary incontinence in adults without neurological disease. *Cochrane Database Syst Rev* 2006;4:CD006235.
63. Wang L, Xie Y, Zhang S, *et al*. Acupuncture for Parkinson's disease. *Cochrane Database Syst Rev* 2006;4:CD006236.
64. Zhang M, He J, Li J, *et al*. Acupuncture for children with cerebral palsy. *Cochrane Database Syst Rev* 2008;2:CD007127.
65. Zhang W, Liu Z, Wu T, *et al*. Acupuncture for chronic fatigue syndrome. *Cochrane Database Syst Rev* 2006;2:CD006010.
66. Zhang W, Weina P, Liu Z, *et al*. Acupuncture for benign prostatic hyperplasia. *Cochrane Database Syst Rev* 2006;2:CD006016.
67. Zhang Y, Clarke J, Feng H, *et al*. Acupuncture for uterine fibroids. *Cochrane Database Syst Rev* 2010;1:CD007221.
68. Zhao H, Liu Jian P, Liu Z, *et al*. Acupuncture for chronic constipation. *Cochrane Database Syst Rev* 2003;2:CD004117.
69. Zhao T, Zhang R, Zhao H. Acupuncture for symptomatic treatment of diabetic peripheral neuropathy. *Cochrane Database Syst Rev* 2006;4:CD006280.
70. Yu J, Liu B, Liu Z, *et al*. Acupuncture for premenstrual syndrome. *Cochrane Database Syst Rev* 2005;2:CD005290.
71. Ernst E, Pittler MH, Wider B, *et al.* Acupuncture: its evidence-base is changing. *Am J Chin Med* 2007;35:21–5.
72. Yoshii A, Plaut DA, McGraw KA, *et al.* Analysis of the reporting of search strategies in Cochrane systematic reviews. *J Med Libr Assoc* 2009;97:21–9.