Health Technology Assessment of Alternative and Traditional Medicines

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HTAsiaLink 2018

Using Scottish Real World Data to Support Decision Making

To celebrate the ISPOR European Meeting being held in Glasgow, the Health Economics and Health Technology Assessment (HEHTA) Research Group at University of Glasgow invite you to an informal reception at the Hunterian Museum at the University. Come and enjoy a drink on the spectacular University of Glasgow campus in the West End of the city and learn about how HEHTA can help you to access Scottish real world data.

Scotland is unique in the UK in that routinely collected data from NHS Scotland is linked offering potentially population-wide analysis of real world evidence on patient care pathways. These data have a wide variety of uses that can support real world decision making in Scotland, but with implications for the whole of the UK and beyond.

As part of the reception we will briefly illustrate this potential with informal oral and poster presentations highlighting work at HEHTA in areas including diabetes, cardiovascular disease, liver disease, respiratory disease and cancer.

SATURDAY 4th NOVEMBER 2017
6.30 - 8.30 PM
Hunterian Museum, University of Glasgow

The museum (www.gla.ac.uk/hunterian/) is a short distance from the ISPOR congress venue, close to a variety of excellent restaurants, and readily accessible by taxi and subway.

YOU'RE INVITED
1. Are ATMs special or different from conventional medicines and health interventions in the context of HTA?

2. How should we assess the value of these medicines?
The goals of the strategy are to support Member States in:

- harnessing the potential contribution of TM to health, wellness and people-centred healthcare (clinical value)
- promoting the safe and effective use of TM by regulating, researching and integrating TM products, practitioners and practice into health systems, where appropriate (systematic and robust assessment)
Complementary and Alternative Medicine (CAM) Working Group

ISPOR Asia Consortium Complementary and Alternative Medicine (CAM) Working Group is established to provide a platform for CAM professionals to exchange information, discuss issues and propose solutions in the effort of an efficient, safe, rational and cost-effective use of various types of CAM therapies in Asia. The goal of the Working Group is to promote safety, efficacy and quality of CAM in Asia and to facilitate the integration of evidence-based and value-based CAM into conventional practices for optimal healthcare in the region.

Free membership on Asia Consortium Complementary and Alternative Medicine (CAM) is open to all Asia Consortium members who are CAM professionals including practitioners, researchers, educators, regulator, healthcare policy makers in and outside of Asia.

Complementary and Alternative Medicine (CAM) Working Group Members

Asia Consortium Complementary and Alternative Medicine (CAM) Group Activities

⇒⇒⇒ Join the Asia Consortium Complementary and Alternative Medicine (CAM)

Founding Chair

Namkwen Kim, D.K.M., MPH, PhD
Director, Center for Comparative Effectiveness Research & Economic Evaluation in Korean Medicine, and Professor, Pusan National University, Yangsan, Gyeongnam, South Korea
Guiding principles of current HTA framework

1. Transparency
2. Comparator(s)
3. Evidence
4. Measure of health outcomes
5. Costs
6. Time horizon and discount rate
7. Perspective (non-health effects and costs outside health budget)
8. Heterogeneity
9. Uncertainty
10. Budget Impact
11. Equity considerations
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Systematic and transparent approach to obtaining all relevant evidence to the decision problem

Gates/iDSI Reference Case 2014
Alternative and traditional medicines – definitions and terminologies

Definitions

Traditional medicine

Traditional medicine has a long history. It is the sum total of the knowledge, skill, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.

Complementary medicine

The terms “complementary medicine” or “alternative medicine” refer to a broad set of health care practices that are not part of that country's own tradition or conventional medicine and are not fully integrated into the dominant health-care system. They are used interchangeably with traditional medicine in some countries.

Herbal medicines

Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products, that contain as active ingredients parts of plants, or other plant materials, or combinations.
Alternative and traditional medicines – definitions and terminologies

http://cam.cochrane.org/operational-definition-complementary-medicine
Complementary, alternative or integrative medicines

- Açai / Euterpe oleracea
- Acupressure
- Acupuncture
- Acustimulation / acupoint stimulation
- African prune / Prunus Africana / Pygeum afric
- Aiyishu (a Chinese herbal medicine)
- Alexander technique
- Alpha-linolenic acid (ALA) (an omega-3 fatty a
- Amino acid supplements (see nutrition exclu:
- Angelica
- Anma (a type of Asian bodywork)
- Anthroposophic medicine
- Antioxidant supplements
- Arachidonic acid (AA or ARA) (an omega-6 fatt
- Aromatherapy
- Art therapy
- Artichoke leaf
- Astragalus / Milkvetch (a Chinese herbal medi
- Auricular acupuncture / ear acupuncture
- Ayurveda / Ayurvedic medicine (a type of Indi
- Vegan diet
- Vegetarian diet
- Visualization techniques
- Vitamin A supplements (see nutrition exclusions above)
- Vitamin B or Vitamin B complex supplements (see nutrition exclusions above)
- Vitamin C supplements (see nutrition exclusions above)
- Vitamin D supplements (see nutrition exclusions above)
- Vitamin E supplements (see nutrition exclusions above)
- Vitamin K supplements (see nutrition exclusions above)
- Vojta method / Reflexlocomotion
- White willow bark
- Whole-body vibration therapy
- Xiaoxingci granule (a Chinese herbal medicine)
- Yarrow / Achillea millefolium extract
- Yoga therapy
- Zero balancing
- Zhixian I pill (a Chinese herbal medicine)
- Zinc supplements (see nutrition exclusions above)
- Zishen Tongli Jianonang (a Chinese herbal medicine)
- Zone therapy

http://cam.cochrane.org/operational-definition-complementary-medicine
Evidence from the Cochrane Collaboration for Traditional Chinese Medicine Therapies

Eric Manheimer, M.S.,1 Susan Wieland, M.P.H., Ph.D.,1 Elizabeth Kimbrough, M.P.H., Ph.D.,1 Ker Cheng, Ph.D.(Cand.),2 and Brian M. Berman, M.D.1

Abstract

Background: The Cochrane Collaboration, an international not-for-profit organization that prepares and maintains systematic reviews of randomized trials of health care therapies, has produced reviews summarizing much of the evidence on Traditional Chinese Medicine (TCM). Our objective was to review the evidence base according to Cochrane systematic reviews.

Methods: In order to detect reviews focusing on TCM, we searched the titles and abstracts of all reviews in Issue 4, 2008 of the Cochrane Database of Systematic Reviews. For each review, we extracted data on the number of trials included and the total number of participants. We provided an indication of the strength of the review findings by assessing the reviewers’ abstract conclusions statement. We supplemented our assessment of the abstract conclusions statements with a listing of the comparisons and outcomes showing statistically significant meta-analyses results.

Results: We identified 70 Cochrane systematic reviews of TCM, primarily acupuncture (n = 26) and Chinese herbal medicine (n = 42), and 1 each of moxibustion and t’ai chi. Nineteen (19) of 26 acupuncture reviews and 22/42 herbal medicine reviews concluded that there was not enough good quality trial evidence to make any conclusion about the efficacy of the evaluated treatment, while the remaining 7 acupuncture and 20 herbal medicine reviews and each of the moxibustion and t’ai chi reviews indicated a suggestion of benefit, which was qualified by a caveat about the poor quality and quantity of studies. Most reviews included many distinct interventions, controls, outcomes, and populations, and a large number of different comparisons were made, each with a distinct forest plot.

Conclusions: Most Cochrane systematic reviews of TCM are inconclusive, due specifically to the poor methodology and heterogeneity of the studies reviewed. Some systematic reviews provide preliminary evidence of Chinese medicine’s benefits to certain patient populations, underscoring the importance and appropriateness of further research. These preliminary findings should be considered tentative and need to be confirmed with rigorous randomized controlled trials.
Recommendation

“…evidence retrieved was limited and had biases. More rigorous and well-designed clinical trials investigating the effects of Chinese herbs on relieving the fatigue and muscle weakness effect in cancer patients receiving chemotherapy is warranted…

Chinese herbal medicines may be used for the management of fatigue in cancer patients receiving chemotherapy in a research environment by a certified and registered practitioner.”
Acupuncture for low back pain no longer recommended for NHS patients

New advice represents a u-turn in treatment for back pain, which affects one in 10 people, after evidence review showed acupuncture no better than a placebo

NICE guideline 2009: “consider offering a course of acupuncture needling comprising up to a maximum of 10 sessions over a period of up to 12 weeks”

NICE guideline 2016: “there was still no compelling and consistent evidence of a treatment-specific effect for acupuncture”

- 30 RCTs
- Some benefit when compared with usual care
- No evidence that it is more effective than sham treatment

Acupuncture is no longer recommended as a treatment for low back pain on the NHS, according to new draft guidelines released today by the National Institute for Health and Care Excellence (Nice).

The u-turn comes after a review of scientific evidence found that the practice was no better than a placebo in treating those living with low back pain and sciatica.
Guiding principles of current HTA framework

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*Positive and negative impacts on quality and length of life, e.g. DALYs averted*
Evaluation of Impact on Health-Related Quality of Life and Cost Effectiveness of Traditional Chinese Medicine: A Systematic Review of Randomized Clinical Trials

Fang Zhang, PhD, Lin-lin Kong, MD, Yi-ye Zhang, MD, and Shu-Chuen Li, PhD

Background: Traditional Chinese Medicine (TCM), an important part of health care in China and with increased popularity worldwide, has received extensive attention from governments at all levels. With the current emphasis on clinical efficacy and cost-effectiveness, TCM, as indeed do all other treatments, requires rigorous evidence to be considered in reimbursement decision-making. Nevertheless, despite the fact that TCM treatment has always been considered to possess the advantage of improving the health-related quality of life (HRQOL) of patients, there is a lack of systematic study about available evidence to assess the impact of TCM treatments on HRQOL of patients.

Objectives: The current study aimed to perform a review of available literature to evaluate whether sufficient evidence existed to allow an assessment of the impact on HRQOL and cost effectiveness of TCM treatments. This information would support a recommendation for wider use of TCM in the clinical setting as well as its consideration for reimbursement.

Methods: A structured search was performed using data sources including MEDLINE, Cumulative Index for Allied Health and Nursing (CINAHL), PubMed, Cochrane database, EBSCO, SciSearch, Embase, and Google Scholar from 2000 to 2010. The search was supplemented with manual search after relevant articles were retrieved.

Results: After culling, a total 31 articles covering a range of TCM therapies applied to a variety of conditions were retrieved. The measurement tools used in these studies to assess impact in patient’s HRQOL were mainly SF-36-based scales, but the results of HRQOL/patient preference studies were inconsistent and inconclusive. Of the 10 articles of cost-effectiveness evaluation of TCM treatments, the majority reported that TCM treatments resulted in better outcomes at a higher cost, but the incremental cost-effectiveness ratio was below the usually recommended thresholds. The overall results showed acupuncture and t’ai chi to be the most studied TCM-related therapies.

Conclusions: The current review showed that there is a relative lack of cost-effectiveness research in TCM. For those few empirical research available, the major emphasis is for acupuncture or t’ai chi showing the acceptance of these branches of TCM that are better understood by the scientific community. The current results also showed the need for studies with better designs and longer duration to ascertain the actual impact of TCM on patients’ HRQOL as well as a need for a generic HRQOL instrument that is specific for TCM.
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Gates/iDSI Reference Case 2014
Existing tools for economic evaluation

• Cost-utility analysis (conventional drug treatments)
• Cost-effectiveness analysis (diagnostic technologies)*
• Cost-consequence analysis (public health interventions)*
• Cost-benefit analysis (public health interventions)*

*Further consideration for decision criteria
Cost-Effectiveness Analysis of Acupuncture, Counselling and Usual Care in Treating Patients with Depression: The Results of the ACUDep Trial

Eldon Spackman¹*, Stewart Richmond², Mark Sculpher¹, Martin Bland², Stephen Brealey², Rhian Gabe², Ann Hopton², Ada Keding², Harriet Lansdown², Sara Perren², David Torgerson², Ian Watt³, Hugh MacPherson²

Background: New evidence on the clinical effectiveness of acupuncture plus usual care (acupuncture) and counselling plus usual care (counselling) for patients with depression suggests the need to investigate the health-related quality of life and costs of these treatments to understand whether they should be considered a good use of limited health resources.

Methods and Findings: The cost-effectiveness analyses are based on the Acupuncture, Counselling or Usual care for Depression (ACUDep) trial results. Statistical analyses demonstrate a difference in mean quality adjusted life years (QALYs) and suggest differences in mean costs which are mainly due to the price of the interventions. Probabilistic sensitivity analysis is used to express decision uncertainty. Acupuncture and counselling are found to have higher mean QALYs and costs than usual care. In the base case analysis acupuncture has an incremental cost-effectiveness ratio (ICER) of £4,560 per additional QALY and is cost-effective with a probability of 0.62 at a cost-effectiveness threshold of £20,000 per QALY. Counselling compared with acupuncture is more effective and more costly with an ICER of £71,757 and a probability of being cost-effective of 0.36. A scenario analysis of counselling versus usual care, excluding acupuncture as a comparator, results in an ICER of £7,935 and a probability of 0.91.

Conclusions: Acupuncture is cost-effective compared with counselling or usual care alone, although the ranking of counselling and acupuncture depends on the relative cost of delivering these interventions. For patients in whom acupuncture is unavailable or perhaps inappropriate, counselling has an ICER less than most cost-
Concluding thoughts

- HTA of ATMs inherently complex
- Valid framework exists; core methodological approaches remain relevant
- Difficult in establishing accurate estimates of treatment effects
- Consider evidence beyond RCTs; initiatives on collecting good quality observational data (utilization pattern)
- Evidence synthesis; approaches to comparative effectiveness
- Need to establish relevant perspectives (patients), may require inclusion of broader health (holistic element), non-health and costs outcomes