

Homeopathy and acupuncture: Do they have place in respiratory medicine

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According to the U.S. National Library of Medicine, **complementary and alternative medicine** (CAM) or “complementary health approaches” are “a group of diverse medical and health care practices and products that are not presently considered to be part of conventional medicine”. It is used alongside modern medicine (complementary medicine) or as an alternative to it (alternative medicine)¹.

This article will review international database for two methods of CAM: homeopathy and acupuncture.

Homeopathy is an alternative approach based on the belief that pharmaceutical substances, which are manufactured in a particular way and which are used in very small quantities, treat physical and mental illnesses.

From its first appearance, homeopathy’s popularity has fluctuated, reaching its heyday in the 19th century when schools of homeopathy, institutes, as well as hospitals, were created. Yet, in the last decade, it has been severely criticized by scientists. From 2000 on, there have been hundreds of studies and reviews on the effectiveness of homeopathy, comparing it to a placebo, to the drugs used in classical medicine, and the comparison of different methods used in homeopathy.

While some studies have shown positive results regarding the effectiveness of homeopathy for treatment of respiratory tract infections, allergic rhinitis, chronic asthma, IPF and lung cancer³⁻⁷, they were not evaluated either due to the small number of participants or the poor quality of trials. What is more, publication bias was ascertained⁸⁻¹⁰.

On the contrary, other studies, reviews and meta-analyses did not find enough evidence that homeopathic medicinal products are more effective than a placebo^{2,8,10-12}.

Consequently, in 2017, Great Britain’s National Health Service begins to discourage the use of homeopathic medication^{13,14}, characterizing homeopathy as a form of treatment devoid of “robust evidence of clinical effectiveness”.

In addition, in 2015 NHMRC (National Health and Medical Research Council) in Australia, after the analysis of 57 systematic reviews based on only major, good quality studies, concluded that homeopathy does not differ from placebos regarding its effectiveness due to the fact that “there were no health conditions for which there was reliable evidence that ho-

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meopathy was effective"¹⁵. The Australian government stops insurance reimbursement for 17 CAM, including homeopathy.

However, in Switzerland, in 2017, the country's government announced that four methods of alternative medicine, which included homeopathy, would be covered by basic health insurance coverage on condition that it is "practiced by conventional medical practitioners who have an additional qualification in one of the four disciplines"¹⁶.

The conflict regarding homeopathy continues.

J.E. Prousky supports that it is not the homeopathic remedy itself, but the homeopathic consultation process as a psychotherapeutic technique that can provide a therapeutic result, given that it includes the recording of a detailed individual and family history, regular follow-up and a trusting relationship between patient and therapist¹⁷.

Some researchers are looking into the application of homeopathic remedies for non-complicated respiratory infections in order to avoid inappropriate use of antibiotics¹⁸.

Yet, it must be noted that the World Health Organization does not recommend the use of homeopathic remedies for diarrhoea and flu in infants, and warns against their use in the treatment of serious diseases, such as HIV, tuberculosis and malaria.

Acupuncture is a key component of Chinese traditional medicine and it is defined as the stimulation of specific points on the body using a variety of techniques such as needling, moxibustion, cupping, acupressure, and newer techniques like electroacupuncture and the use of lasers on acupuncture points.

Acupuncture has been used in China and other Asian countries for approximately 4000 years and has become a popular form of alternative medicine in America and Europe as a treatment for a vast list of diseases, particularly for pain conditions. Hundreds of studies have been conducted on the effectiveness of acupuncture on respiratory diseases (bronchial asthma, COPD, infections, allergic rhinitis and cystic fibrosis)^{19,21-24}. Attempts have been made to investigate the biological effects of acupuncture mechanisms^{25,26}.

Nevertheless, opinions on acupuncture are divided, and quite a few scientists support that the positive results of this method are based on a powerful placebo effect^{25,27} and they accuse acupuncturists of publication bias²⁸ and poor study design.

One of acupuncture use is for smoking cessation through the implementation of techniques such as nee-

ding, acupressure and the use of lasers on acupuncture points. Some studies have shown positive effects^{29,30}, whereas the Cochrane Review, in 2014, uncovered that acupuncture is less efficient in comparison with nicotine substituting treatment and that its effect is similar to a placebo³¹.

Various acupuncture techniques have exhibited different complications. In 2013, a systematic review³² compiled the adverse side-effects from case reports. The most frequent complications were skin infections (bacterial and viral), organ injuries (pneumothorax, central or peripheral nervous system trauma, heart and major vessel trauma), burns and hemorrhaging complications. It is reported that complications were most frequently associated with the experience of the acupuncturist and a lack of compliance with sterilizing techniques.

In conclusion, complementary and alternative medicine (CAM) is widely implemented on a global scale. The clinical findings regarding the effectiveness of these two CAM techniques (homeopathy and acupuncture) are controversial. The existing database does not support the use of these methods to treat respiratory diseases. Furthermore, it must be emphasized that with the implementation of these methods, one runs the risk of delaying treatments recommended by classical medicine, with negative consequences that may entail for the patient's health. In addition, these CAM methods can provoke serious complications, especially when practiced by incompetent practitioners. In any case, neither the ERS nor the ATS include these techniques in the guidelines pertaining to the treatment of any respiratory diseases.

REFERENCES

1. U.S. National Library of Medicine. National Institutes of Health. <https://www.nlm.nih.gov/tsd/acquisitions/cdm/subjects24.html>
2. McCarney RW, Lasserson TJ, Linde K, Brinkhaus B. An Overview of two cochrane systematic reviews of complementary treatments for chronic asthma: Acupuncture and homeopathy. *Respiratory Medicine* 2004; 98:687-96.
3. Chucherat M, Haugh MC, Gooch M, Boissel JP. Evidence of clinical efficacy of homeopathy. *Eur J Clin Pharmacol* 2000; 56:27-33.
4. Mathie R, Lloyd SM, Legg LA, et al. Randomised placebo-controlled trials of individualised homeopathic treatment: Systematic review and meta-analysis. *Syst Rev* 2014; 3:142.
5. Gaerther K, Müllner M, Friehs H, et al. Additive homeopathy in cancer patients: Retrospective survival data from a homeopathic outpatient until at the Medical University of Vienna 2014; 22:320-32.
6. Beghi G, Morselli-Labate A. Does homeopathic medicine have a preventive effect on respiratory tract infections? A real life

- observational study. *Multidisciplinary Respiratory Medicine* 2016; 11:12.
7. Banerjee K, Mathie RT, Costelloe C, Howick J. Homeopathy for allergic rhinitis: A systematic review. *J Altern Complement Med* 2017; 23:426-44.
 8. Shang A, Huwiler-Müntener K, Nartey L, et al. Are the clinical effects of homeopathy placebo effects? Comparative study of placebo-controlled trials of homeopathy and allopathy. *Lancet* 2005; 366:726-32.
 9. Mathie R, Ramparsad N, Legg LA, et al. Randomised, double-blind, placebo-controlled trials of non-individualised homeopathic treatment: Systematic review and meta-analysis. *Syst Rev* 2017; 6:63.
 10. Ernst E. A systematic review of systematic reviews of homeopathy. *Br J Clin Pharmacol* 2002; 54:577-82.
 11. White A, Slade P, Hunt C, Hart A, Ernst E. Individualised homeopathy as an adjunct in the treatment of childhood asthma: a randomized placebo-controlled trial. *Thorax* 2003; 58:317-21.
 12. Hawke K, van Driel ML, Buffington BJ, McGuire TM, King D. Homeopathic medicinal products for preventing and treating acute respiratory tract infections in children. *Cochrane Database Syst Rev* 2018; 4:CD005974. doi: 10.1002/14651858.CD005974.pub4.
 13. Items which should not routinely be prescribed in primary care: Guidance for CCGs. NHS 2017. <https://www.england.nhs.uk/wp-content/uploads/2017/11/items-which-should-not-be-routinely-prescribed-in-pc-ccg-guidance.pdf>
 14. Clinical evidence for homeopathy. Specialist pharmacy service 2017. <https://www.england.nhs.uk/wp-content/uploads/2017/11/sps-homeopathy.pdf>
 15. Review of the Australian Government rebate on natural therapies for private health insurance 2015. [http://www.health.gov.au/internet/main/publishing.nsf/content/4899F1657E19A6F4CA2583A50020140D/\\$File/Natural%20Therapies%20Overview%20Report%20Final%20with%20copyright%2011%20March.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/4899F1657E19A6F4CA2583A50020140D/$File/Natural%20Therapies%20Overview%20Report%20Final%20with%20copyright%2011%20March.pdf)
 16. Complementary medicine in Switzerland now a mandatory health insurance service 2017. <https://www.yourhealthyourchoice.com.au/news-features/complementary-medicine-in-switzerland-now-a-mandatory-health-insurance-service/>
 17. Prousky J. Repositioning individualized homeopathy as a psychotherapeutic technique with resolvable ethical dilemmas. *Journal of Evidence-Based Integrative Medicine* 2018; 23.
 18. Fixen A. Homeopathy in the age of antimicrobial resistance: Is it a viable treatment for upper respiratory tract infections? *Homeopathy* 2018; 107:99-114.
 19. Zhang W. Effects of acupuncture on the pulmonary function and heart rate variability in different state of bronchial asthma. *Zhen Ci Yan Jiu* 2007; 32:42-8.
 20. Katsuya EM, de Castro MA, Carneiro CR, Yamamura Y, Silveira VL. Acupuncture reduces immune-mediated pulmonary inflammatory lesions induced in rats. *Forsch Komplementmed* 2009; 16:413-6.
 21. Nash E, Bradley H, Chapman E, Rashid R, Whitehouse JL. The Effectiveness of acupuncture in managing symptoms in CF adults. *Thorax* 2015; 70:A220.
 22. Feng J, Wang X, Li X, Zhao D, Xu J. Acupuncture for chronic obstructive pulmonary disease (COPD). *Medicine (Baltimore)* 2016; 95:e4879.
 23. Xie Y, Wang JJ, Li GY, Li XL, Li JS. Acupuncture for idiopathic pulmonary fibrosis: Protocol for a systematic review. *Medicine* 2017; 96:e9114.
 24. Bao H, Si D, Gao L, et al. Acupuncture for the treatment of allergic rhinitis: A systematic review protocol. *Medicine* 2018; 97:e13772.
 25. Ernst E. Acupuncture – A critical analysis. *Journal of Internal Medicine* 2005; 259.
 26. Ning Z, Lao L. Acupuncture for pain management in evidence-based medicine. *J Acupunct Meridian Stud* 2015; 8:270-73.
 27. Colquhoun D, Novella SP. Acupuncture is theatrical placebo. *Anesth Analg* 2013; 116:1360-63.
 28. Shizhe D, Xiaofeng Z, Rong D, et al. Is acupuncture no more than a placebo? Extensive discussion required about possible bias. *Exp Ther Med* 2015; 10:1247-52.
 29. He D, Medbø JJ, Høstmark AT. Effect of acupuncture on smoking cessation or reduction: An 8-month and 5-year follow-up study. *Prev Med* 2001; 33:364-72.
 30. Angelova S, Marinova D. Acupuncture versus combined acupuncture and nicotine substituting therapy for the treatment of nicotineism. *European Respiratory Journal* 2011; 38: p1075.
 31. White A, Rampes H, Ping Liu J, et al. Acupuncture and related interventions for smoking cessation. *Cochrane Database Systematic Reviews* 2014.
 32. Xu S, Wang L, Cooper E, et al. Adverse Events of acupuncture: A systematic review of case reports. *Evid Based Complement Alternat Med* 2013; 2013:581203.