

# The Research Evidence Base for Homeopathy

# Systematic reviews of randomised controlled trials (RCTs) of homeopathy

- Four of five major comprehensive reviews of RCTs in homeopathy have reached broadly positive conclusions.<sup>1-4</sup> Based on a smaller selection of trials, a fifth review came to a negative conclusion about homeopathy.<sup>5</sup>
- Two major reviews of RCTs of individualised homeopathy have reached broadly positive conclusions.<sup>6,7</sup>
- Positive conclusions have been reported in 9 of 35 reviews of RCTs in specific categories of medical condition (the other 26 are largely inconclusive):
  - •allergies and upper respiratory tract infections<sup>8,9</sup>
  - •childhood diarrhoea10
  - •post-operative ileus<sup>11</sup>
  - •rheumatic diseases<sup>12</sup>
  - •seasonal allergic rhinitis<sup>13-15</sup>
  - •vertigo16

## Placebo-controlled RCTs of homeopathy - the original data

- Up to the end of 2014, the peer-reviewed literature included 153 papers reporting placebo-controlled RCTs, of which 104 have data eligible for our analysis: 43 positive; 5 negative; 56 not statistically conclusive. In addition to the medical conditions above, there is a positive balance of evidence in the following, for example:
  - •influenza<sup>17,18</sup>
  - •insomnia<sup>19-21</sup>
  - •sinusitis<sup>22,23</sup>
- There is evidence from singleton placebo-controlled RCTs in favour of homeopathy for a number of other conditions including: bronchitis,<sup>24</sup> chronic fatigue syndrome,<sup>25</sup> fibromyalgia,<sup>26</sup> premenstrual syndrome.<sup>27</sup>

## Cost effectiveness of homeopathy

• Integration of homeopathy with conventional treatment is associated with better clinical outcomes for similar or lower costs.<sup>28-30</sup>

### **Clinical observational studies**

- 70.7% of 6,554 follow-up patients, treated at Bristol Homeopathic Hospital for a wide range of chronic medical complaints, reported positive health changes.<sup>31</sup>
- Many patients who attended the Royal London Homeopathic Hospital were able to reduce or stop conventional medication following homeopathic treatment.<sup>32</sup>

#### **Basic Science**

- Laboratory research has obtained evidence that water may retain information about homeopathically-prepared solutes.<sup>33-35</sup>
- Additional laboratory studies have shown that homeopathic dilutions can exert biological effects<sup>e.g. 36-38</sup>

## **REFERENCES**

- 1. Kleijnen J, Knipschild P, ter Riet G. Clinical trials of homeopathy. Br Med J 1991; 302: 316–23.
- 2. Linde K, Clausius N, Ramirez G, et al. Are the clinical effects of homoeopathy placebo effects? A meta-analysis of placebo-controlled trials.

Lancet 1997; 350: 834-43.

- 3. Linde K, Scholz M, Ramirez G, et al. Impact of study quality on outcome in placebo controlled trials of homeopathy. J Clin Epidemiol 1999; 52: 631–6.
- 4. Cucherat M, Haugh MC, Gooch M, Boissel JP. Evidence of clinical efficacy of homeopathy A meta-analysis of clinical trials. Eur J Clin Pharmacol 2000; 56: 27–33.
- 5. Shang A, Huwiler-Muntener K, Nartey L, et al. Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy. Lancet 2005; 366: 726–32.
- Linde K, Melchart D. Randomized controlled trials of individualized homeopathy: a state-of-the-art review. J Altern Complement Med 1998, 4: 371–388.
- 7. Mathie RT, Lloyd SM, Legg LA, et al. Randomised placebo-controlled trials of individualised homeopathic treatment: systematic review and meta-analysis. Syst Rev 2014, 3: 142.
- 8. Bornhöft G, Wolf U, Ammon K, et al. Effectiveness, safety and cost-effectiveness of homeopathy in general practice –summarized health technology assessment. Forsch Komplementärmed 2006; 13 Suppl 2: 19–29.
- Bellavite P, Ortolani R, Pontarollo F, et al. Immunology and homeopathy. 4.
   Clinical studies Part 1. Evidence-based Complementary and Alternative Medicine;eCAM, 2006; 3:293-301
- 10. Jacobs J, Jonas WB, Jimenez-Perez M, Crothers D. Homeopathy for childhood diarrhea: combined results and metaanalysis from three randomized, controlled clinical trials. Pediatr Infect Dis J 2003; 22: 229–34.
- Barnes J, Resch K-L, Ernst E. Homeopathy for postoperative ileus?
   A meta-analysis. J Clin Gastroenterol 1997; 25: 628–33.
- 12. Jonas WB, Linde K, Ramirez G. Homeopathy and rheumatic disease Complementary and alternative therapies for rheumatic diseases II.

  Rheum Dis Clin North Am 2000; 26: 117–23.
- 13. Wiesenauer M, Lüdtke R. A meta-analysis of the homeopathic treatment of pollinosis with Galphimia glauca. Forsch Komplementärmed Klass Naturheilkd 1996; 3: 230–6.
- 14. Taylor MA, Reilly D, Llewellyn-Jones RH, et al. Randomised controlled trials of homoeopathy versus placebo in perennial allergic rhinitis with overview of four trial series. Br Med J 2000; 321: 471–6.
- 15. Bellavite P, Ortolani R, Pontarollo F, et al. Immunology and homeopathy.
- 4. Clinical studies Part 2. eCAM 2006; 3:397-409.
- 16. Schneider B, Klein P, Weiser M. Treatment of vertigo with a homeopathic complex remedy compared with usual treatments: a meta-analysis of clinical trials. Arzneimittelforschung 2005;55: 23–9.
- 17. Ferley JP, Zmirou D, D'Adhemar D, Balducci F. A controlled evaluation of a homoeopathic preparation in the treatment of influenza like syndromes. Br J Clin Pharmacol 1989; 27: 329–335.
- 18. Papp R, Schuback G, Beck E, et al. Oscillococcinum® in patients with influenza-like syndromes: a placebo-controlled double-blind evaluation.

  Br Homoeopath J 1998; 87: 69–76
- 19. Kolia-Adam N, Solomon E, Bond J, Deroukakis M. The efficacy of Coffea cruda on insomnia: a double blind trial. Simillimum 2008; 21: 91–99.

- Naudé DF, Couchman IMS, Maharaj A Chronic primary insomnia: efficacy of homeopathic simillimum. Homeopathy 2010; 99: 63–68.
- 21. Harrison CC, Solomon EM, Pellow J. The effect of a homeopathic complex on psychophysiological onset insomnia in males: a randomized pilot study. Altern Ther Health Med 2013;19: 38-43.
- 22. Friese K-H, Zabalotnyi DI. Homeopathy in acute rhinosinusitis. A double-blind, placebo controlled study shows the effectiveness and tolerability of a homeopathic combination remedy. HNO 2007; 55: 271–7.
- 23. Zabolotnyi DI, Kneis KC, Richardson A, et al. Efficacy of a complex homeopathic medication (Sinfrontal) in patients with acute maxillary sinusitis: a prospective, randomized, doubleblind, placebo-controlled, multicenter clinical trial. Explore (NY) 2007: 3: 98–109.
- 24. Diefenbach M, Schilken J, Steiner G, Becker HJ. Homeopathic therapy in respiratory tract diseases. Evaluation of a clinical study in 258 patients.
- Z Allgemeinmed 1997; 73: 308-14.
- 25. Weatherley-Jones E, Nicholl JP, Thomas KJ, et al. A randomized, controlled, triple-blind trial of the efficacy of homeopathic treatment for chronic fatigue syndrome.
  J Psychosom Res 2004; 56: 189–97.
- 26. Bell I, Lewis D, Brooks A, et al. Improved clinical status in fibromyalgia patients treated with individualized homeopathic remedies versus placebo.

Rheumatology 2004; 43: 577-582.

- 27. Yakir M, Kreitler S, Brzezinski A, et al. Effects of homeopathic treatment in women with premenstrual syndrome: a pilot study. Br Homeopath J 2001; 90: 148–53.
- 28. Witt C, Keil T, Selim D, et al. Outcome and costs of homeopathic and conventional treatment strategies: a comparative cohort study in patients with chronic disorders.

  Complement Ther Med 2005; 13: 79–86.
- 29. Witt CM, Lüdtke R, Baur R, Willich SN. Homeopathic medical practice: long-term results of a cohort study with 3,981 patients. BMC Public Health 2005; 5: 115.
- 30. Trichard M, Chaufferin G Nicoloyannis N. Pharmacoeconomic comparison between homeopathic and antibiotic treatment strategies in recurrent acute rhinopharyngitis in children. Homeopathy 2005; 94: 3–9.
- 31. Spence D, Thompson E, Barron S. Homeopathic treatment for chronic disease: a 6-year university hospital based outpatient observational study. J Altern Complement Med 2005; 5: 793–8.
- 32. Sharples F, van Haselen R, Fisher P. NHS patients' perspective on complementary medicine. Complement Ther Med 2003; 11: 243–8.
- 33. Rey L. Thermoluminescence of ultra-high dilutions of lithium chloride and sodium chloride, Physica (A) 2003; 323: 67–74.
- 34. Bell IR, Lewis DA, Brooks AJ, et al. Gas discharge visualisation evaluation of ultramolecular doses of homeopathic medicines under blinded, controlled conditions. J Altern Complement Med 2003; 9: 25–38.
- 35. Elia V, Niccoli M. Thermodynamics of extremely diluted aqueous solutions. Ann N Y Acad Sci 1999; 879: 241–8.
- 36. Linde K, Jonas WB, Melchart D, et al. Critical review and meta-analysis of serial agitated dilutions in experimental toxicology. Hum Exp Toxicol 1994; 13: 481–92.
- 37. Belon P, Cumps J, Ennis M, et al. Histamine dilutions modulate basophil activation. Inflamm Res 2004; 53: 181–8.
- 38. Witt CM, Bluth M, Albrecht H, et al. The in vitro evidence for an effect of high homeopathic potencies A systematic review of the literature.

Complement Ther Med 2007; 15: 128-38.