Homeopathy is an evidence based science

A few of the evidences are compiled & presented below here.

Homeopathic medicines are no placebos

When homeopathy is discussed in critical circles, one can hear regularly that homeopathy is a mere placebo. Below four studies proving this common critique wrong are presented.

Backgroud: what is a Placebo?

A placebo ("*I shall please*" – in Latin) is a pharmacologically inert substance (for ex. Sugar pills) that produces an effect similar to what would be expected of a pharmacologically active substance (like antibiotics).

If there is no drug substance, then how is placebo working?

" The physician's belief in the treatment and the patient's faith in the physician exert a mutually reinforcing effect; the result is a powerful remedy that is almost guaranteed to produce an improvement and sometimes a cure." (Petr Skrabanek and James McCormick, *Follies and Fallacies in Medicine*, p. 13).

Following are studies that contradict the claim that homeopathy is a placebo:

12.1. "Efficacy of homeopathic and antibiotic treatment strategies in cases of mild and moderate bovine clinical mastitis" - Department of Animal Nutrition and Animal Health, Faculty of Organic Agricultural Sciences, University of Kassel, Germany

Citation and Link:

Werner C, Sobiraj A, Sundrum A., "Efficacy of homeopathic and antibiotic treatment strategies in cases of mild and moderate bovine clinical mastitis", *J Dairy Res.* 2010 Nov;77(4):460-7. Epub 2010 Sep 8.

http://www.ncbi.nlm.nih.gov/pubmed/20822562

Aim & Method:

"The objective of this <u>clinical control trial</u> was to examine the effectiveness of the classical homeopathic treatment strategy in cases of mild and moderate bovine clinical mastitis in comparison with antibiotic and placebo treatments. A total of 136 lactating dairy cows with 147 affected quarters from four herds in Germany were randomly allocated to three treatment groups. The cows were examined on days 0, 1, 2 and on days 7, 14, 28 and 56 post initial infection to assess clinical signs. Simultaneously, with the exception of days 1 and 2, quarter milk samples for laboratory examinations (bacteriology, somatic cell count) were collected to assess bacteriological and cytological cure rates."

<u>**Results:**</u> "...the difference between the homeopathic and the placebo treatment at day 56 was significant (P<0.05) The results indicate a therapeutic effect of homeopathic treatment in cases of mild and moderate clinical mastitis..."

12.2. "Homeopathic medicinal treatment slows down prostate cancer growth in rats" - Samueli Institute, Alexandria, USA.

Citation and Link:

Jonas WB, Gaddipati JP, Rajeshkumar NV, Sharma A, Thangapazham RL, Warren J, Singh AK, Ives JA, Olsen C, Mog SR, Maheshwari RK, "Can homeopathic treatment slow prostate cancer growth?", *Integr Cancer Ther.*, 2006 Dec; 5(4):343-9.

http://www.ncbi.nlm.nih.gov/pubmed/17101763

Method:

..... Prostate tumor cells DU-145, LNCaP, and MAT-LyLu were exposed to 5 homeopathic remedies. Male Copenhagen rats were injected with MAT-LyLu cells and exposed to the same homeopathic remedies for 5 weeks.

<u>Results:</u> They appear to significantly slow the progression of cancer and reduce cancer incidence and mortality in Copenhagen rats injected with MAT-LyLu prostate cancer cells.

12.3. Effects of Homeopathic medicines on Hay fever - University Department of Bacteriology and Immunology, Western Infirmary, Glasgow, and Department of Statistics, University of Glasgow, United Kingdom

Citation and Link:

DavidTaylor Reilly, Charles Mcsharry, MoragA. Taylor, Tom Aitchison, "Is homoeopathy a placebo response? controlled trial of homoeopathic potency, with pollen in hayfever as model", *The Lancet*, Volume 328, Issue 8512, Pages 881 - 886, 18 October 1986.

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2886%2990410-1/abstract

Method:

The hypothesis that homoeopathic potencies are placebos was tested in a_randomised, double-blind, placebo-controlled trial. The study model chosen compared the effects of a homoeopathic preparation of mixed grass pollens with placebo in 144 patients with active hayfever.

<u>Results</u>: The homoeopathically treated patients showed a significant reduction in patient and doctor assessed symptom scores. The significance of this response was increased when results were corrected for pollen count and the response was associated with a halving of the need for antihistamines. <u>No evidence emerged to support the idea that placebo action fully explains the clinical responses to homoeopathic drugs.</u>

12.4. Can homeopaths detect homeopathic medicines? A pilot study for of the proving hypothesis -Academic Unit, Royal London Homoeopathic Hospital, London, UK

Citation and Link:

Vickers A, McCarney R, Fisher P, van Haselen R, "Can homeopaths detect homeopathic medicines? A pilot study for a randomised, double-blind, placebo controlled investigation of the proving hypothesis", *Br. Homeopath J.* 2001 Jul;90(3):126-30.

http://www.ncbi.nlm.nih.gov/pubmed/11479779

Aim & Method:

Homeopaths believe that a medicine, which causes a particular symptom in a healthy volunteer, will cure a similar symptom in a sick patient. From this phenomenon, it is possible to deduce a hypothesis: homeopaths should be able to distinguish a homeopathic medicine from a placebo by taking both and observing their effects. If true, this would support an effect of homeopathic medicines different from that of placebo. The study design was a double-blinded, crossover trial. It consisted of a 1-week study medication period, a 2-week washout period and a further 1-week on study medication. Bryonia in a 12c potency was chosen as the trial medication. Participants were recruited in the UK from the Faculty of Homeopathy and the Society of Homeopaths and were currently healthy, aged 18 or over with at least three years' clinical experience of homeopathy.

<u>Results:</u> There was evidence of an order effect: subjects were much more likely to think they received active Bryonia in the first rather than the second period. *In this study a promising trend was observed that symptoms reported by some homeopaths may not be completely attributable to placebo.*

12.5. "Double-blind, placebo-controlled homeopathic pathogenetic trials: symptom collection and analysis"- Centro Omeopatico Vescovio, Rome, Italy.

Citation and Link:

Dominici G, Bellavite P, di Stanislao C, Gulia P, Pitari G., "Double-blind, placebo-controlled homeopathic pathogenetic trials: symptom collection and analysis", *Homeopathy*. 2006 Jul;95(3):123-30.

http://www.ncbi.nlm.nih.gov/pubmed/16815514

Aim & Method:

" Homeopathic pathogenetic trials (provings) are fundamental to homeopathy. Since most of the data from available provings have not been statistically evaluated, it is unclear how specific reported symptoms are and how they differ from those reported by people taking placebo. We combine and analyse data from two different homeopathic pathogenic trials--including 10 and 11 provers, respectively, and both including 30% placebo-to test the null hypothesis that there is no significant difference between the number of symptoms in placebo and verum groups".

<u>Results:</u> "The principal results were: Placebo reported less symptoms than verum groups. *Symptom distribution according to predefined classes (common symptoms increased in intensity and/or duration-, cured, old, new and exceptional) was statistically different between placebo and verum group at a high level of significance (P<0.001). Compared to verum, placebo provers reported less new and old but more common (increased in duration or intensity) symptoms. Within repertory categories, other differences were detected. The two groups differ in terms of the duration of each symptom and kinetics of symptoms: most symptoms were more persistent in verum than in placebo groups and verum provers recorded a decreasing number of symptoms with time".*

12.6. Double-blind, placebo-controlled homeopathic pathogenetic trials: symptom collection and analysis - InstitutionCentro Omeopatico Vescovio, Rome, Italy.

Citation and Link:

Dominici G, Bellavite P, di Stanislao C, Gulia P, Pitari G, "Double-blind, placebo-controlled homeopathic pathogenetic trials: symptom collection and analysis", *Homeopathy* 2006 Jul; 95(3):123-30.

http://www.unboundmedicine.com/medline/ebm/record/16815514/full_citation/Double_blind_placebo_controlled_homeopathic_pathogenetic_trials:_symptom_collection_and_analysis_

Aim & Method:

"Homeopathic pathogenetic trials (provings) are fundamental to homeopathy. Since most of the data from available provings have not been statistically evaluated, it is unclear how specific reported symptoms are and how they differ from those reported people taking by placebo. METHOD: We combine and analyse data from two different homeopathic pathogenic trials--including 10 and 11 provers, respectively, and both including 30% placebo-to test the null hypothesis that there is no significant difference between the number of symptoms in placebo and verum groups."

Results:

"The principal results were: Placebo reported less symptoms than verum groups. Symptom distribution according to predefined classes (common symptoms increased in intensity and/or duration-, cured, old, new and exceptional) was statistically different between placebo and verum group at a high level of significance (P<0.001). Compared to verum, placebo provers reported less new and old but more common (increased in duration or intensity) symptoms. Within repertory categories, other differences were detected. The two groups differ in terms of the duration of each symptom and kinetics of symptoms: most symptoms were more persistent in verum than in placebo groups and verum provers recorded a decreasing number of symptoms with time. Placebo provers did not show such a temporal pattern."

12.7. Are the clinical effects of homeopathy placebo effects? A meta-analysis of placebo-controlled trials. Münchener Modell, Centre for Complementary Medicine Research, Technische Universität/Ludwig-Maximillans-Universität, München, Germany.

Citation & Link:

Linde K, Clausius N, Ramirez G, Melchart D, Eitel F, Hedges LV, Jonas WB, "Are the clinical effects of homeopathy placebo effects? A meta-analysis of placebo-controlled trials", *Lancet* 1998 Jan 17;351(9097):220.

http://www.ncbi.nlm.nih.gov/pubmed/9310601

Method:

"We sought studies from computerised bibliographies and contracts with researchers, institutions, manufacturers, individual collectors, homeopathic conference proceedings, and books. We included all languages. *Double-blind and/or randomised placebo-controlled trials* of clinical conditions were considered. *Our review of 185 trials identified 119 that met the inclusion criteria. 89 had adequate data for meta-analysis,* and two sets of trial were used to assess reproducibility. Two reviewers assessed study quality with two scales and extracted data for information on clinical condition, homeopathy type, dilution, "remedy", population, and outcomes."

Results:

"The combined odds ratio for the 89 studies entered into the main meta-analysis was 2.45 (95% CI 2.05, 2.93) in favour of homeopathy. The odds ratio for the 26 good-quality studies was 1.66 (1.33, 2.08), and that corrected for publication bias was 1.78 (1.03, 3.10). Four studies on the effects of a single remedy on seasonal allergies had a pooled odds ratio for ocular symptoms at 4 weeks of 2.03 (1.51, 2.74). Five studies on postoperative ileus had a pooled mean effect-size-difference of -0.22 standard deviations (95% CI -0.36, -0.09) for flatus, and -0.18 SDs (-0.33, -0.03) for stool (both p < 0.05).

The results of our meta-analysis are not compatible with the hypothesis that the clinical effects of homeopathy are completely due to placebo. However, we found insufficient evidence from these studies that homeopathy is clearly efficacious for any single clinical condition. Further research on homeopathy is warranted provided it is rigorous and systematic."