

Research Meta-analyses of Clinical Studies in Homeopathy

Pediatr Infect Dis J. 2003 Mar;22(3):229-34

Homeopathy for childhood diarrhea: combined results and metaanalysis from three randomized, controlled clinical trials.

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BACKGROUND: Previous studies have shown a positive treatment effect of individualized homeopathic treatment for acute childhood diarrhea, but sample sizes were small and results were just at or near the level of statistical significance. Because all three studies followed the same basic study design, the combined data from these three studies were analyzed to obtain greater statistical power. **METHODS:** Three double blind clinical trials of diarrhea in 242 children ages 6 months to 5 years were analyzed as 1 group. Children were randomized to receive either an individualized homeopathic medicine or placebo to be taken as a single dose after each unformed stool for 5 days. Parents recorded daily stools on diary cards, and health workers made home visits daily to monitor children. The duration of diarrhea was defined as the time until there were less than 3 unformed stools per day for 2 consecutive days. A metaanalysis of the effect-size difference of the three studies was also conducted. **RESULTS:** Combined analysis shows a duration of diarrhea of 3.3 days in the homeopathy group compared with 4.1 in the placebo group ($P = 0.008$). The metaanalysis shows a consistent effect-size difference of approximately 0.66 day ($P = 0.008$). **CONCLUSIONS:** The results from these studies confirm that individualized homeopathic treatment decreases the duration of acute childhood diarrhea and suggest that larger sample sizes be used in future homeopathic research to ensure adequate statistical power. Homeopathy should be considered for use as an adjunct to oral rehydration for this illness.

K. Linde, N. Clausius, G. Ramirez, et al.,

Are the Clinical Effects of Homeopathy Placebo Effects? A Meta-analysis of Placebo-Controlled Trials

Lancet, September 20, 1997, 350:834-843.

This state of the art meta analysis reviewed 186 studies, 89 of which fit pre-defined criteria. Rather than count and compare the number of trials which show efficacy of treatment, the researchers pooled the data from the various studies to assess data. The results showed that patients taking homeopathic medicines were 2.45 times more likely to experience a positive therapeutic effect than placebo.

J. Kleijnen, P. Knipschild, G. ter Riet,

Clinical Trials of Homeopathy

British Medical Journal, February 9, 1991, 302:316-323.

This is the most widely cited meta-analysis of clinical research prior to 1991. This meta-analysis reviewed 107 studies of homeopathic medicines, 81 of which (or 77%) showed positive effect. Of the best 22 studies, 15 showed efficacy. The researchers concluded: "The evidence presented in this review would probably be sufficient for establishing homeopathy as a regular treatment for certain indications." Further, "The amount of positive evidence even among the best studies came as a surprise to us."

Research Controlled Clinical Studies Published in Peer Reviewed Journals

a1: Br Homeopath J. 2001 Jul;90(3):148-53. Effects of homeopathic treatment in women with premenstrual syndrome: a pilot study. Yakir M, Kreitler S, Brzezinski A, Vithoukas G, Oberbaum M, Bentwich Z. The Hebrew University, Hadassah Medical School, Jerusalem, Israel. yakirm@cc.huji.ac.il

Alternative therapies in general, and homeopathy in particular, lack clear scientific evaluation of efficacy. Controlled clinical trials are urgently needed, especially for conditions that are not helped by conventional methods. The objective of this work was to assess the efficacy of homeopathic treatment in relieving symptoms associated with premenstrual syndrome (PMS). It was a randomised controlled double-blind clinical trial. Two months baseline assessment with post-intervention follow-up for 3 months was conducted at Hadassah Hospital outpatient gynaecology clinic in Jerusalem in Israel 1992-1994. The subjects were 20 women, aged 20-48, suffering from PMS. Homeopathic intervention was chosen individually for each patient, according to a model of symptom clusters. Recruited volunteers with PMS were treated randomly with one oral dose of a homeopathic medication or placebo. The main outcome measure was scores of a daily menstrual distress questionnaire (MDQ) before and after treatment. Psychological tests for suggestibility were used to examine the possible effects of suggestion. Mean MDQ scores fell from 0.44 to 0.13 ($P < 0.05$) with active treatment, and from 0.38 to 0.34 with placebo (NS). (Between group $P = 0.057$). Improvement $> 30\%$ was observed in 90% of patients receiving active treatment and 37.5% receiving placebo ($P = 0.048$). Homeopathic treatment was found to be effective in alleviating the symptoms of PMS in comparison to placebo. The use of symptom clusters in this trial may offer a novel approach that will facilitate clinical trials in homeopathy. Further research is in progress

[Efficacy of ARNICA in varicose vein surgery; results of a randomized, double-blind, placebo-controlled pilot trial]

Wolf M, Tamaschke C, Mayer W, Heger M.

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INTRODUCTION: In homeopathy ARNICA is widely used as a woundhealing medication and for the treatment of hematomas. **OBJECTIVE:** In this pilot study the efficacy and safety of ARNICA D12 in patients following varicose vein surgery were investigated. **DESIGN:** Prospective, randomized, double-blind, placebo-controlled pilot trial according to ICH GCP guidelines. **SETTING:** The study was conducted by a surgeon at the Angiosurgical Clinic, Berlin- Buch. **INTERVENTION:** After randomized allocation, 60 patients received either ARNICA D12 or placebo. Start of medication occurred the evening before operation with 5 globules. On the operation day one preoperative and hourly postoperative dosages after awakening were given. On days 2-14 of the study 5 globules 3 times a day were given. **OUTCOME CRITERIA:** Surface (in cm²) and using a three-point verbal rating scale) and intensity of hematomas induced by operation, complications of wound healing, and intensity of pain (five-point verbal rating scale) as well as efficacy and safety of the study medication were assessed. **RESULTS:** Hematoma surface was reduced (from day 7 to day 14) under ARNICA by 75.5% and under placebo by 71.5% ($p = 0.4726$). The comparison of hematoma surface (small, medium, large) using the verbal rating scale yielded a value of $p = 0.1260$. Pain score decreased by 1.0 +/- 2.2 points under ARNICA and 0.3 +/- 0.8 points under placebo ($p = 0.1977$). Remission or improvement of pain was observed in 43.3% of patients in the ARNICA group and in 27.6% of patients in the placebo group. Tolerability was rated as very good in all cases. **CONCLUSION:** The results of this pilot study showed a trend towards a beneficial effect of ARNICA D12 with regard to reduction of hematoma and pain during the

postoperative course. For a statistically significant proof of efficacy of ARNICA D12 in patients following varicose vein surgery a larger sample size is necessary. Copyright 2003 S. Karger GmbH, Freiburg

PMID: 14605480

C. N. Shealy, MD, R.P. Thomlinson, V. Borgmeyer,
Osteoarthritic Pain: A Comparison of Homeopathy and Acetaminophen

American Journal of Pain Management, 1998;8:89-91

A double-blinded study to document the relative efficacy of homeopathic remedies in comparison to acetaminophen for the treatment of pain associated with osteoarthritis (OA) among 65 patients. An IRB approved protocol. Results of the study documented better pain relief in the homeopathic group (55% achieved measured relief from homeopathy as compared to 38% from acetaminophen); however, the superiority of this treatment, in comparison with the acetaminophen group, did not reach statistical significance. The investigators conclude that homeopathic treatments for pain in OA patients appear to be safe and at least as effective as acetaminophen, and are without its potential adverse effects including compromise to both liver and kidney function. Many of the patients asked to continue with the homeopathic treatment.

M. Weiser, W. Strosser, P. Klein,
Homeopathic vs. Conventional Treatment of Vertigo: A Randomized Double-Blind Controlled Clinical Study

Archives of Otolaryngology--Head and Neck Surgery, August, 1998, 124:879-885.

This was a study with 119 subjects with various types of vertigo, half of whom were given a homeopathic medicine (a combination of four homeopathic medicines) and half were given a leading conventional drug in Europe for vertigo, betahistine hydrochloride. The homeopathic medicines were found to be similarly effective and significantly safer than the conventional control.

D. Reilly, M. Taylor, N. Beattie, et al.,
Is Evidence for Homeopathy Reproducible?

Lancet, December 10, 1994, 344:1601-6.

This study successfully reproduced evidence from two previous double-blinded trials all of which used the same model of homeopathic immunotherapy in inhalant allergy. In this third study, 9 of 11 patients on homeopathic treatment improved compared to only 5 of 13 patients on placebo. The researchers concluded that either homeopathic medicines work or controlled studies don't. Their work has again been recently replicated and is submitted for publication. (See **Is Homeopathy a Placebo Response?** *Lancet* 1986, below.)

J. Jacobs, L. Jimenez, S. Gloyd,
Treatment of Acute Childhood Diarrhea with Homeopathic Medicine: A Randomized Clinical Trial in Nicaragua,

Pediatrics, May 1994, 93,5:719-25.

This study was the first on homeopathy to be published in an American medical journal. The study compared individualized high potency homeopathic preparations against a placebo in 81 children, between ages 6 mo. and 5 yrs., suffering with acute diarrhea. The treatment group benefited from a statistically significant 15% decrease in duration. The authors noted that the clinical significance would extend to decreasing dehydration and postdiarrheal malnutrition and a significant reduction in morbidity.

E. Ernst, T. Saradeth, and K.L. Resch,
Complementary Treatment of Varicose Veins: A Randomized Placebo-controlled, Double-Blind Trial,

Phlebology, 1990, 5:157-163.

This study of 61 patients showed a 44% improvement in venous filling time in the homeopathic treated group when compared with placebo.

P. Fisher, A. Greenwood, E.C. Huskisson, et al.,
Effect of Homeopathic Treatment on Fibrositis
British Medical Journal, August 5, 1989, 299:365-66.

This trial was double-blind with a crossover design, comparing R toxicodendron to a placebo in 30 patients all suffering from an identical syndrome identified as the admission criteria. It showed a significant reduction in tender spots, by 25%, when patients were given the homeopathic medicine, as compared to when they were given the placebo.

D. Reilly, M. Taylor, C. McSherry,
Is Homeopathy a Placebo Response? Controlled Trial of Homeopathic Potency with Pollen in Hayfever as Model,
Lancet, October 18, 1986, 881-86.

The double-blind study compared a high dilution homeopathic preparation of grass pollens against a placebo in 144 patients with active hay fever. The study method considered pollen counts, aggravation in symptoms and use of antihistamines and concluded that patients using homeopathy showed greater improvement in symptoms than those on placebo, and that this difference was reflected in a significantly reduced need for antihistamines among the homeopathically treated group. The results confirmed those of the pilot study and demonstrate that homeopathic potencies show effects distinct from those of the placebo

Research Other Clinical Studies of Interest

Homeopathy. 2003 Jul;92(3):131-4.

The homeopathic approach to the treatment of symptoms of oestrogen withdrawal in breast cancer patients. A prospective observational study.
Thompson EA, Reilly D.

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This paper reports on an investigation of the homeopathic approach to the management of symptoms of oestrogen withdrawal in women with breast cancer. Forty-five patients entered the study. The most common presenting symptoms were hot flushes (HF) (n=38), mood disturbance (n=23), joint pain (n=12), and fatigue (n=16). Other symptoms included sleeplessness, reduced libido, weight gain, cystitis, vaginal dryness and skin eruptions. The active intervention was an individualised homeopathic medicine. Forty women (89%) completed the study. Significant improvements in mean symptom scores were seen over the study period and for the primary end-point 'the effect on daily living' scores. Symptoms other than HF such as fatigue and mood disturbance appear to be helped. Significant improvements in anxiety, depression and quality of life were demonstrated over the study period. The homeopathic approach appears to be clinically useful in the management of oestrogen withdrawal symptoms in women with breast cancer whether on or off Tamoxifen and improves mood disturbance. A placebo-controlled trial would be the next stage in this line of inquiry.

PMID: 12884894

Homeopathy. 2003 Apr;92(2):108-14. **Homeopathic treatment of Japanese patients with intractable atopic dermatitis.**

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The objective of the study was to evaluate the efficacy of homeopathic treatment of intractable atopic dermatitis (IAD). Seventeen IAD patients were given individualized homeopathic treatment in addition to conventional dermatological therapy from 6 months to 2 years and 7 months. Although all of the patients had previously been treated with conventional medicine and various psychological approaches, they had had severe conditions and shown no significant sign of improvement. The efficacy of homeopathic treatment was measured by objective assessments of the skin condition and the patients' own assessments, using a 9 point scale similar to the Glasgow Homeopathic Outcome Scale, was used. Over 50% improvement was reported in overall impression and in their skin conditions by all patients, in itchiness by 15 of the patients, in sleep disturbance by 10 out of 13 patients, in satisfaction in daily life by nine out of 12, in fulfillment at work by seven out of 11 and in satisfaction with human relations by 10 out of 14. Two detailed case histories are reported.

J Altern Complement Med. 2003 Feb;9(1):133-41.

Controlled clinical trials evaluating the homeopathic treatment of people with human immunodeficiency virus or acquired immune deficiency syndrome.

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CONTEXT: Homeopathic medicine developed significant popularity in the nineteenth century in the United States and Europe as a result of its successes treating the infectious disease epidemics during that era. Homeopathic medicine is a medical system that is specifically oriented to using nanopharmacologic and ultramolecular doses of medicines to strengthen a person's immune and defense system rather than directly attacking the microbial agents.

OBJECTIVES: To review the literature referenced in MEDLINE and in nonindexed homeopathic journals for placebo-controlled clinical trials using homeopathic medicines to treat people with AIDS or who are human immunodeficiency virus (HIV)-positive and to consider a different theoretical and methodological approach to treating people with the viral infection. FINDINGS: A total of five controlled clinical trials were identified. A double-blinded, placebo-controlled study was conducted on 50 asymptomatic HIV-positive subjects (stage II) and 50 subjects with persistent generalized lymphadenopathy (stage III) in whom individualized single-remedy homeopathic treatment was provided. A separate body of preliminary research was conducted using homeopathic doses of growth factors. Two randomized double-blinded, placebo-controlled studies were conducted with a total of 77 people with AIDS who used only natural therapies over a 8-16-week period. Two other studies were conducted over a 2.5-year period with 27 subjects in an open-label format.

SETTINGS: The first study was conducted by the Regional Research Institute for Homeopathy in Mumbai, India, under the Central Council for Research in Homeopathy, with the approval of the Ministry of Health and Family Welfare, Government of India. The second body of studies was conducted in clinic settings in California, Oregon, Arizona, Hawaii, New York, and Washington. RESULTS: The first study found no statistically significant improvement in CD4 T-lymphocytes, but did find statistically significant pretest and post-test results in subjects with stage III AIDS, in CD4 ($p = 0.008$) and in CD8 ($p = 0.04$) counts. The second group of studies found specific physical, immunologic, neurologic, metabolic, and quality-of-life benefits, including improvements in lymphocyte counts and functions and reductions in HIV viral loads. CONCLUSIONS: As a result of the growing number of people with drug-resistant HIV infection taking structured treatment interruptions, homeopathic medicine may play a useful role as an adjunctive and/or alternative therapy.

A.K.Vallance,

Can Biological Activity be Maintained at Ultra-high Dilution? An Overview of Homeopathy, Evidence and Bayesian Philosophy

The Journal of Alternative and Complementary Medicine 1998 4:1;49-76

"The objective of this article is to critically review the major pieces of evidence on ultra-high dilution (UHD) effects and suggest how the scientific community should respond to its challenge. Such evidence has been conducted on a diverse range of assays -- immunologic, physiological, behavioral, biochemical, and clinical in the form of trials of homeopathic remedies. Evidence of UHD effects has attracted the attention of physicists who have speculated on their physical mechanisms. ...It is argued that if the phenomenon was uncontroversial, the evidence suffices to show that UHD effects exist. However, given that the observations contradict well-established theory, normal science has to be abandoned and scientists need to decide for themselves what the likelihood of UHD effects are. ...The difficulty in publishing high-quality UHD research in conventional journals prevents a fair assessment of UHD effects. Given that the existence of UHD effects would revolutionize science and medicine, and given the considerable empirical evidence of them, the philosophies of science tell us that possible UHD effects warrant serious investigation and serious attention by scientific journals."

T.E.Whitmarsh,

When Conventional Treatment Is Not Enough: A Case of Migraine Without Aura Responding to Homeopathy

The Journal of Alternative and Complementary Medicine 1997 1:2;159-162.

Following three years of unsuccessful conventional treatment, a 55 year old male suffering from common migraine which would commence with nausea followed by vomiting every hour for 12 hours and throbbing pain well localized to the left fronto-parietal area, was referred to Glasgow Homeopathic Hospital. Consultation with a homeopathic physician, who also has extensive experience in diagnosis and treatment of headache disorders, leads to the prescription of a single homeopathic remedy (*Bronia*) which was absolutely effective for the condition. On follow-up 2 months later, the patient has been headache-free and had lost no time from work. He had only taken the *Bronia* for 3 weeks (ie; 12 doses). He remains attack free 3 years after treatment. This case is offered as an open, admittedly retrospective study, comparing the best of conventional migraine therapy with appropriate homeopathic therapy in the same patient.

J. Lamont

Homeopathic Treatment of Attention Deficit Hyperactivity Disorder: A Controlled Study

British Homoeopathic Journal, October, 1997, 86:196-200.

Forty-three children were randomly assigned to either placebo or homeopathic treatment groups, and then those initially given a placebo were given an individualized homeopathic medicine. All subjects underwent a homeopathic interview to determine which individualized remedy was appropriate. Results show significant improvement once the patient began taking the homeopathic medicine.

K.H. Friese, S. Kruse, H. Moeller

Acute Otitis Media in Children: A Comparison of Conventional and Homeopathic Treatment

Biomedical Therapy, 60,4,1997:113-116 (Originally published in German in *Hals-Nasen-Ohren (Head, Nose, and Otolaryngology)*, August, 1996:462-66).

This study of 131 children allowed parents to choose homeopathic or conventional medical care from their ear, nose, and throat doctor. 103 children underwent homeopathic treatment, while 28 underwent conventional care. They found that the total recurrences of the homeopathic treated group was .41 per patient, while the antibiotic treatment group was .70 per patient. Of the "homeopathic" children who did have another earache, 29.3% had a maximum of three recurrences, while 43.5% of the "antibiotic" children had a maximum of six recurrences.

Research Basic Laboratory Studies

Mol Cell Biochem. 2003 Nov;253(1-2):339-45.

Towards understanding molecular mechanisms of action of homeopathic drugs: an overview.

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The homeopathic mode of treatment often encourages use of drugs at such ultra-low doses and high dilutions that even the physical existence of a single molecule of the original drug substance becomes theoretically impossible. But homeopathy has sustained for over two hundred years despite periodical challenges thrown by scientists and non-believers regarding its scientificity. There has been a spurt of research activities on homeopathy in recent years, at clinical, physical, chemical, biological and medical levels with acceptable scientific norms and approach. While clinical effects of some homeopathic drugs could be convincingly shown, one of the greatest objections to this science lies in its inability to explain the mechanism of action of the microdoses based on scientific experimentations and proofs. Though many aspects of the mechanism of action still remain unclear, serious efforts have now been made to understand the molecular mechanism(s) of biological responses to the potentized form of homeopathic drugs. In this communication, an overview of some interesting scientific works on homeopathy has been presented with due emphasis on the state of information presently available on several aspects of the molecular mechanism of action of the potentized homeopathic drugs.

PMID: 14619985

Bourkas, A.N. Delinick, C.G. Karagiannopoulos

Experimental Evaluation of Homeopathic Remedies.

European Journal of Drug Metabolism and Pharmacokinetics.

First International Meeting on Scientific Basis of Modern Pharmacy

Athens, Greece June 8-10, 1994

Vittorio Elia and Marcella Niccoli

Thermodynamics of extremely diluted aqueous solutions.

Annals of the New York Academy of Sciences, June 1999

An extensive thermodynamic study has been carried out on aqueous solutions obtained through successive dilutions and succussions of 1% in weight of some solutes up to extremely diluted solutions, (less than 1×10^{-5} mol kg⁻¹) obtained via several 1/100 successive dilution processes. The interaction of acids or bases with the extremely diluted solutions has been studied calorimetrically at 25°C. Measurements have been performed of the heats of mixing of acid or basic solutions, having different concentrations, with bidistilled water or with the extremely diluted solutions. Despite the extreme dilution of the solutions, an exothermic heat of mixing in excess has been found, in about the 92% of the cases, with respect to the corresponding heat of mixing with the untreated solvent. Here [it is shown] that successive dilutions and succussions may alter permanently the physical-chemical properties of the solvent water. The nature of the phenomena here described still remains unexplained, but significant experimental results are obtained.

J. Dittmann and G. Harisch

Characterization of Differing Effects Caused by Homeopathically Prepared and Conventional Dilutions Using Cytochrome P450 2E1 and Other Enzymes as Detection Systems

The Journal of Alternative and Complementary Medicine 1996 2:2,279-290.

Target of investigation was to ascertain differences in the effects of homeopathic potencies (D) and equally concentrated conventional dilutions (V) on *p*-nitrocatechol formation catalyzed by CYP 2E1. *Arsenicum album* and *potassium cyanatum* (D) were compared to equivalent dilutions of As₂O₃ and KCN (V). Significant differences in enzyme activity were found. The difference of influence exists and this may be attributable to the manufacturing process of homeopathic drugs, namely, the stepwise dilution with intermediate agitation.

K. Linde, W.B. Jonas, D. Melchart, D., et al.,

Critical Review and Meta-Analysis of Serial Agitated Dilutions in Experimental Toxicology

Human and Experimental Toxicology, 1994, 13:481-92.

This meta-analysis of 105 studies in toxicology showed that homeopathic medicines may be useful in treating toxic exposures. This meta-analysis was conducted by a similar group of researchers who recently published a meta-analysis on clinical studies in *The Lancet*.

P.C. Endler, W. Pongratz, G. Kastberg, et al.,

The Effect of Highly Diluted Agitated Thyroxine on the Climbing Activity of Frogs

Veterinary and Human Toxicology, 1994, 36:56.

This, and the study below, show that a homeopathic medicine can influence the growth and development of tadpoles in water.

P.C. Endler, W. Pongratz, R. van Wijk, et al.,

Transmission of Hormone Information by Non-molecular Means,

FASEB Journal, 1994, 8, Abs.2313.

This, and the study above, show that a homeopathic medicine can influence the growth and development of tadpoles in water.

J. Benveniste, P.C. Endler and J. Schulte, (eds.),

Further Biological Effects Induced by Ultra High Dilutions: Inhibition by a Magnetic Field," in Ultra High Dilution,

Dordrecht: Kluwer Academic, 1994, 35.

This, and the study below, show that certain magnetic fields can neutralize the effects of a homeopathic medicine.

J. Benveniste, B. Arnoux, L. Hadji,

Highly Dilute Antigen Increases Coronary Flow of Isolated Hart from Immunized Guinea-pigs.

FASEB Journal, 1992, 6:Abs.1610.

This, and the study above, show that certain magnetic fields can neutralize the effects of a homeopathic medicine.

E. Davenas, B. Poitevin, and J. Benveniste

Effect on Mouse Peritoneal Macrophages of Orally Administered Very High Dilutions of Silica

European Journal of Pharmacology, April, 1987, 135:313-319.

This study showed Silica 6C and Silica 10C induced a statistically significant increase in immune function, as measured in macrophages in the blood of mice.

Research Econometric Studies

Jennifer Jacobs, MD, MPH, Edward H. Chapman, MD, Dht, and Dean Crothers, MD

Patient Characteristics and Practice Patterns of Physicians Using Homeopathy.

Archives of Family Medicine, November Vol 7, p 537-40 1998.

The authors surveyed 27 physicians who specialize in homeopathy, soliciting information about their patients. They compared these findings with national statistics on patients treated by general and family-practice physicians. Their findings complement data published in France, detailed below. Physicians using homeopathy spent more time than the national

average with each patient, but ordered fewer tests and prescribed fewer conventional medicines. The authors-- -- also found that patients who see homeopathic physicians are younger, more affluent, and more likely to be seeking treatment for a chronic condition than those seen by a cross-section of general and family-practice physicians. The study was funded by Boiron Research Foundation.

Caisse Nationale de l'Assurance Maladie des Travailleurs Salaris, 1996

A study of 130,000 prescriptions confirmed the results of the 1991 French Government Report (see below) and suggest further benefit and savings to the homeopathic approach to care. This survey also noted that the number of paid sick leave days by patients under the care of homeopathic physicians were 3.5 times less (598 days/year) than patients under the care of general practitioners (2,017 days/year). Although homeopathic medicines in France represent 5% of all medicines prescribed by physicians, they represent only 1.2% of all drug reimbursements due to their lower cost per prescription. (Homeopathic medicines are reimbursable under the French health care system).

Jacobs, J, Smith, N.

Charges, utilization, and practice patterns from a pilot insurance program covering alternative medical services.

American Public Health Association Conference, New York City, November 18-21, 1996. Study conducted in Seattle, WA which compared the utilization and cost of homeopathic, naturopathic, and acupuncture services. Researchers concluded that homeopathic care was the least costly and that patient visits to homeopaths were less often than to other alternative care professionals. (This study, however, did not compare utilization or costs against conventional medical care). See also, W.B. Jonas and J. Jacobs, *Healing with Homeopathy*. New York: Warner, 1996.

Cost-effectiveness of homeopathic treatment in a dental practice.

British Homoeopathic Journal. January, 1993;82,1:22-28

This study evaluated a single homeopathic dentist's practice and suggested that it was more cost-effective than conventional dental care.

Swayne, J. W. Feldhaus.

The cost and effectiveness of homeopathy.

British Homoeopathic Journal July 1992;81,3:148-150.5H.- Study suggested that doctors practicing homeopathic medicine issued fewer prescriptions and at a lower cost than their conventional medical colleagues.

Gerhard, I, G. Reimers, C. Keller, and M. Schmuck,

Weibliche fertilitasstorungen. Vergleich homoopathischer einzelmittel--mit konventioneller hormontherapie

Therapeutikon. 1991;7:309-315

A small study of the homeopathic treatment for infertility. This study showed that homeopathic care for infertility was 30 times less expensive per successful delivery than the match comparison group given conventional care.

French Government Report: Social Security Statistics.

CNAM (National Inter-Regulations System) 61, January 1991.

Conducted by the French government in 1991, this study showed a significantly reduced cost from homeopathic care versus conventional medical care. The totality of costs associated with homeopathic care per physician was approximately one-half of the totality of care provided by conventional primary care physicians. However, because homeopathic physicians, on average, saw significantly fewer patients, the overall cost per patient under homeopathic care was still a significant 15% less. It is also appeared that these savings increase the longer a physician has been using homeopathy.

