The Evidence for Homoeopathy

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Does Homoeopathy Work? What Evidence is There? The answers to these seemingly simple question provoke remarkable debate, the evidence needed varying greatly with the needs of the questioner – be they patients, practitioners, managers or academics. This paper attempts to address the demands of the these differing interest groups. It is based mainly based on the developmental "Glasgow Model" of i ntegrative care from the team at the Glasgow Homoeopathic Hospital - a National Centre for Integrating Complementary and Orthodox Medicine.

Outline of the Paper and Questions Discussed:

ABSTRACT

Homoeopathy is a branch of western medicine which was traditionally rejected by western medical orthodoxy over the last 200 years due to conceptual and scientific clash. It uses microdoses of potential toxins to provoke defense and self-regulatory responses rather than the more orthodox approach of blocking body reactions. This approach hints at its clinical scope: it can help, at times resolve, conditions which are intrinsically reversible rather than mechanical problems, deficiencies or irreversible breakdowns in body functions where it is only palliative.

In recent years there has been a renaissance of interest, and a reduction in resistance. Public demand has soared, and with it professional interest - around 20% of Scotland's general practitioners have completed basic training, and hospital consultants private views suggest an impending professional change [1]. This is partly occasioned by public interest in complementary medicine and a sympathy with the more mind-body approach of homoeopathy, and partly by recent scientific evidence. Some homoeopathic dilutions are so extreme they are dismissed by critics as only placebo. Yet trials and meta-analyses of controlled trials are pointing towards real effects, mechanism of action unknown. Clinical outcome studies suggest useful clinical impact and excellent safety. There seems to be a potential to enhance patient care by integrating homoeopathy and orthodox care.

A. INTRODUCTION & BACKGROUND COMMENTS

1. Some Background Comments on Homoeopathy

Over 200 years, and despite, until recently, strong orthodox rejection, this therapy has established itself throughout much of the world. Its use is steadily increasing, and it is claimed to be an effective, safe and acceptable form of care in acute and chronic problems, both physical and mental. Using an outline structure, this paper examines the evidence for this claim through a series of questions which might be applied when judging any form of care. This is preceded with some data on the nature of evidence in today's health care which has helped shape the emphasis of this paper.

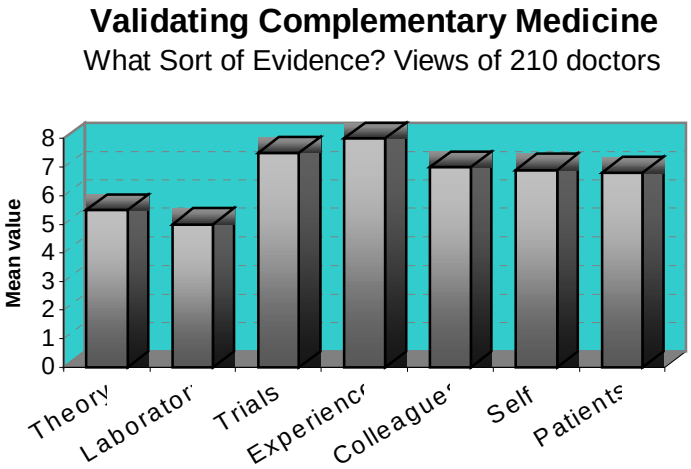
In essence homoeopathy differs from conventional approaches in that while much of orthodox treatment is designed to directly limit, block or copy body reactions, homoeopathy may stimulate the body's own defense and homeostatic responses. The two approaches are complementary and can be used together. To prepare a homoeopathic medicine, a toxic substances is studied to determine which body systems it can stress or derange. Then, if a patient's illness involves disturbances closely corresponding to this toxic pattern, the toxin is prescribed, attenuating through dilution, to provoke homoeostatic responses - supporting the body's attempts to correct the disease. Critics and advocates agree that the levels of dilution ensure the medicine is non-toxic, but critics argue they are too dilute to be active. In addition to the medicines, there are also differences in the homoeopathic approach to the patient. The homoeopathic clinical method in chronic or complex problems involves a whole person history which encourages enhanced therapeutic encounters. Further discussion about the background, clinical systems or applications of homoeopathy are outside the scope of this paper but readers may wish to refer to the bibliography and the information in reference 2 [2] and Fisher's bibliography in reference 3 [3].

2. The Nature of Proof: An Evidence Profile

When I asked 210 primary care doctors to rate different forms of evidence that in practice they would want before using or recommending an unorthodox therapy their answers suggested that evidence forms a multi-dimensional mosaic - an 'Evidence Profile [4]. As Figure 1 shows, theoretical factors are seen as least important, while a systematic examination of outcome ("Experience") is placed highest, with clinical trials next. Professional experience and patients' views are still rated very highly, well ahead of theoretical or laboratory evidence.

Figure 1

In the 1980's those who sought evidence for homoeopathy called for clinical trials, then meta-analyses of these trials; in the 90's cost-utility analysis and patient satisfaction emerged as critical factors. The homoeopathic community has addressed the former as best it can (and I will touch on the results of the trials to date), and is now turning its attention towards the latter.



B. THE EVIDENCE PROFILE FOR HOMOEOPATHY

1. Is it effective when examined scientifically? Is it a placebo response?

No one argues that homoeopathy is wholly ineffective, but scientific scepticism, stemming mostly from a lack of a plausible mechanism of action, has led many commentators to confidently assume that homoeopathy's clinical success is due *solely* to placebo responses. With my co-workers and independent colleagues at Glasgow University we have conducted 4 double blind placebo controlled trials specifically designed to examine the evidence for this placebo hypothesis [5 6 7 8]. All 4 have produced positive results. Figure 2 summarises and illustrates the pattern of the results which clearly favoured homoeopathy over placebo. We were presented, and in turn presented the scientific community [9], with the challenge that either these results suggested that homoeopathy works, or, that the clinical trial is flawed. If homoeopathy is solely a placebo then the trial as a methodology is producing false positive results, which are predictable and reproducible, and at a rate which would undermine its use as a scientific tool for assessing orthodox treatments.

Over the 18 year time frame of this 4 trail enquiry many other researchers have similarly attempted to address the placebo hypothesis using controlled trials, and by 1997 there had been over 180 controlled, and 115 randomized trials. To try and give an overall assessment of the critical mass of evidence one small overview and three comprehensive independent meta-analyses have been conducted. These show that the balance of evidence favours homoeopathy being more than a placebo. Certainly this research has failed to bring forward any credible evidence to the contrary. The definition of meta-analysis is changing, and so the earlier overviews might better be called criteria based reviews. True meta-analyses, in the sense of combining original data from different trials, are rare beasts both in general and in homoeopathy (although in fact the pooled analysis shown in Figure 2 achieved this to some degree).

Figure 2

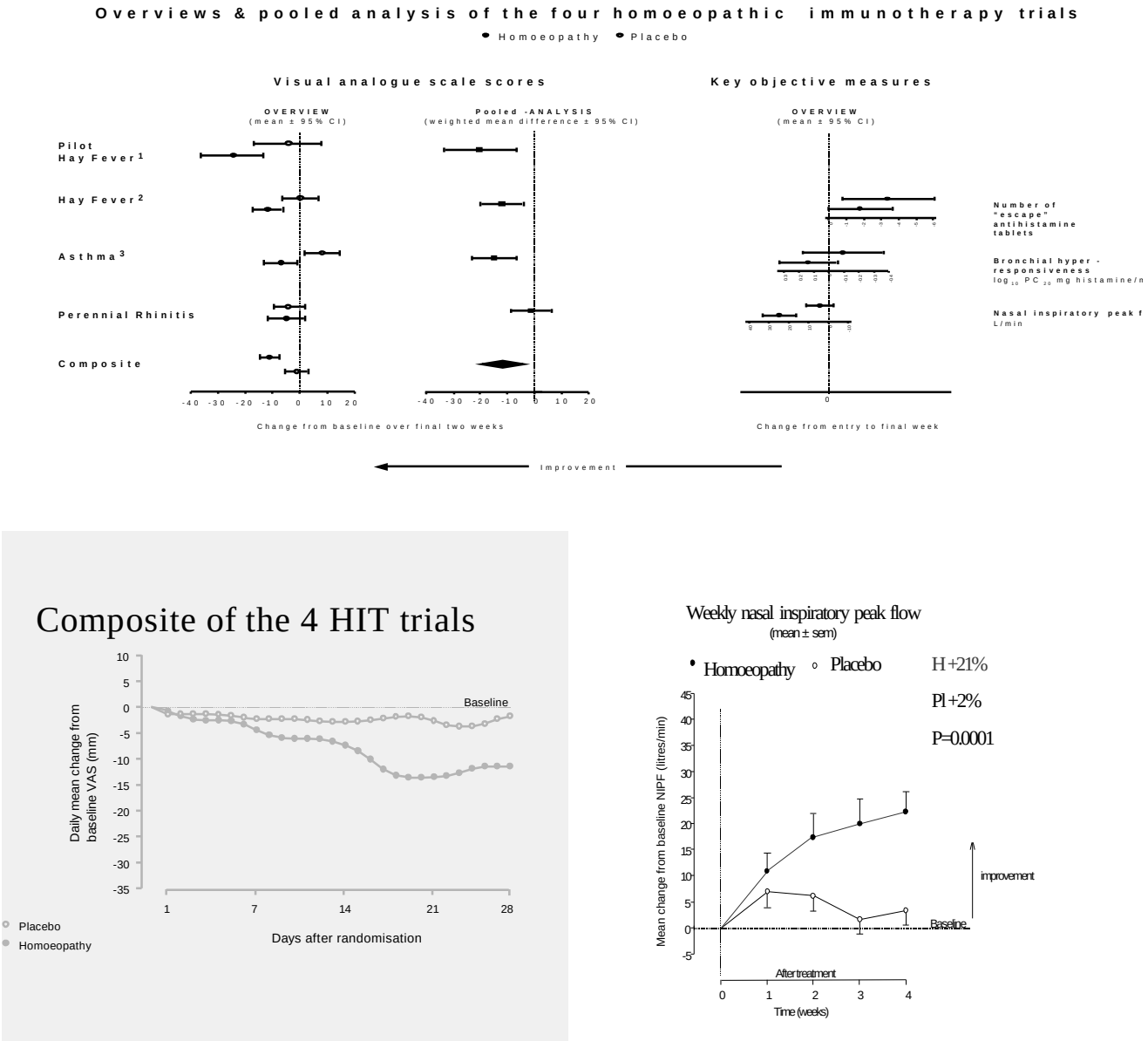


Figure 2: Figures (from ref. 8 BMJ 2000;321:471-6) summarising and illustrating the 4 HIT trials (pilot and principle in hay fever, confirmatory in asthma and perennial rhinitis). All used homoeopathic allergen desensitisation as a model to test a) the placebo hypothesis, and b) the reproducibility of the evidence in favour of homoeopathy. The top figure shows the patterns of the 4 trials. Bottom left is the composite of the VAS symptom score in all 252 patients, bottom right shows the objective measure from the 4th trial.

In 1990 Hill and Doyen published a small unfavourable review of 40 trial but this is considered flawed by selection bias and an incomplete database [10]. The first comprehensive review was published in the BMJ in 1991 by Kleinen et al [11]. This team headed by Prof. Knipschild of the Department of Epidemiology at Limburg University was commissioned by the Dutch Government to independently review the evidence for homoeopathy. They spent two years assembling and analysing the trials. They found 107 controlled trials - 14 classical, 58 single remedy, 26 combinations, 9 isopathy. They commented 'Most trials seemed to be of very low quality, but there were many exceptions. There was a positive trend regardless of quality. Overall,

of the 105 trials with interpretable results, 81 trials indicated positive results, in 24 no positive effects were found.' They concluded 'The evidence presented in this review would probably be sufficient for establishing homoeopathy as a reg ular treatment for certain indications... Based on this evidence we would be ready to accept that homoeopathy can be efficacious, if only the mechanism of action were more plausible.'.

In a completely new review of work up to 1996, published in the Lancet in 1997, Linde et al [12] found that 73% of trials to date are in favour of a greater than placebo action from homoeopathy. Their criteria based meta-analysis of 89 trials gave a pooled -odds ration of 2.45 with homoeopathy (showing twice the effects of placebo). The statistical significance proved robust when corrected for key variable including likely publication bias.

The most up to date review is the independent review of The Homoeopathic Medicine Research Group ordered by the European Parliament to repor t to the European Commission Directorate General XII: Science, Research and Development. This again concluded that the balance of evidence is in favour of homeopathy. They also selected from the trials 17 comparisons in 2001 patients deemed suitable for a pooled p-value meta-analysis. This gave a p -value of 0.0003, and the comment that "it is likely that among the tested homeopathic approaches some had an added effect over nothing or placebo" [13].

These trials were not primarily designed to validate specif ic elements from the diverse range of homoeopathic therapeutics, nor to compare homoeopathy to conventional therapy. This will take a long time and is mostly being tackled by other methodologies. Rather they scientifically test the 'placebo only' hypothesis - and they have found that explanatory model lacking. Early attempts at assessing impact in specific conditions by selective meta -analyses (for example in osteoarthritis [14] and post-operative ileus [15]) mostly note the positive trend but have to conclude tha t there is not yet enough data to draw firm conclusions. Rather they scientifically test the 'placebo only' hypothesis - and they have found that explanatory model lacking.

The veterinary research appears also to be producing supportive evidence that hom oeopathy has a greater than placebo effect. For example - work is suggesting that homoeopathy can reduce antibiotic use and still birth rates in commercial farming - see the work of Day in stillbirths in pigs and bovine mastitis [16 17].

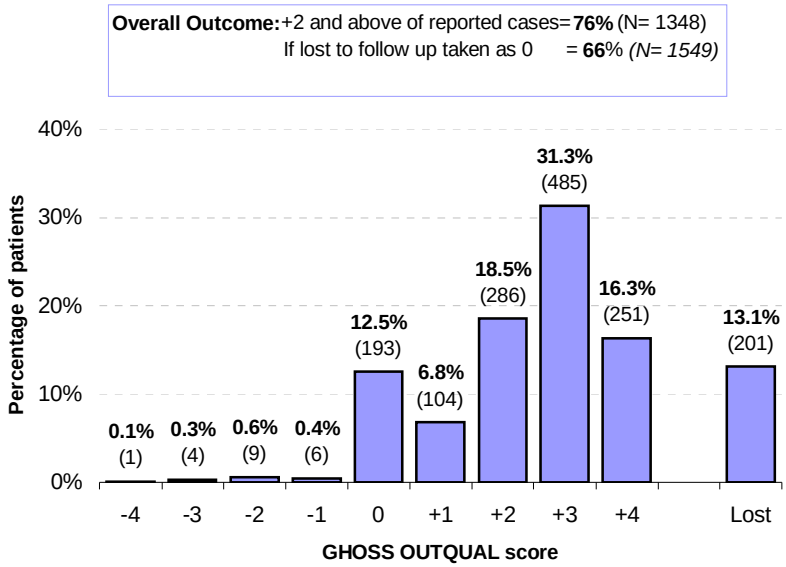
The laboratory eviden ce is in its infancy but a recent meta -analysis of 105 publications exploring the protective effects of serial agitated dilutions of toxic preparations noted that while most studies were of low quality, the high quality studies were more likely to show pos itive effects [18]. Claims of biophysical changes in such preparations are also being made, e.g. in NMR [19]. As an illustrative example of the controversial scientific claims Benveniste now says that delayed coagulation of plasma occurs when mixed with water which was pre-exposed to the (digitally recorded) *signal* of heparin (ref www.digibio.com).

2. It is effective when applied clinically?

While clinical trials have mainly been used to test the placebo hypothesis, obser vational studies audit of outcome is being used to test the results of clinical care across the spectrum from primary to tertiary care. Figure 3 is taken from an action research cycle tracking the results of prescriptions made in a primary care context using a scale which links outcome to impact on quality of life (GHHOS -OUTQUAL Glasgow Homoeopathic Hospital Outcome Outcome Scale) where +2 or above is a response deemed to be of significant value, as described in the text box below:

GHH Outcome Scale	
Cured/ Back to normal	**+4**
Major improvement	**+3**
Moderate improvement, affecting daily living	**+2**
Slight improvement, no effect on daily living	**+1**
No change/Unsure	**0**
Slight deterioration, no effect on daily living	**-1**
Moderate deterioration, affecting daily living	**-2**
Major deterioration	**-3**
Disastrous deterioration	**-4**

Figure 3: Shows the results of over 1348 prescriptions for acute problems in primary care, tracked prospectively[20]. These results appear to confirm the traditional claims of important beneficial impact on clinical outcome, with cost and iatrogenesis containment.



Beyond such simple primary care applications good results are being obtained in more complex problems when treated by a homoeopathic expert in an out patient (ambulatory) setting. Table 1 shows results, as rated by patients, 1 year after out patient care at Glasgow Homoeopathic Hospital (GHH), a National Centre for Integrating Complementary and Orthodox Care [21].

Table 1: Audit of Outcome of Care - 100 Out patients at GHH

100 sequential patients followed up after 1 year with 80% returns.

At presentation:
81% had failed to conventional treatment
47% had seen a Consultant for the problem
After 1 year:
60% improved in the presenting complaint
61% in well being
49% has a sustained improvement of value in daily living
37% had a sustained reduction in conventional therapy.

At a tertiary care level, in patient care at the GHH is showing that even after conventional care had proved ineffective, or has plateaued in its effect, patients can be significantly helped by a holistic care approach with an integrative care programme which includes judicious blending of complementary approaches, including homoeopathy, with a conventional perspective. Table 2 shows two surveys, each of 200 sequential in-patients with advanced and complicated illness, who were treated in this way.

Table 2 Summary from Audits of 200 In Patients at GHH

At presentation:

100% had already had conventional care
97% has seen a Consultant for the problem
85% rated the problem as causing major disruption to daily living
67% had previously needed hospitalised for the problem

At a range of 3 -6 months after treatment(94% response rate):
Clinical Outcome
70% had a useful improvement in the presenting complaint
67% had a useful improvement in general mood and well being.

Impact on conventional care:
40% reported less consultations with their GP.
36% reported decreased use of conventional medication
33% reported fewer admissions to hospital
30% reported less outpatient/ambulatory visits
(Ref 21 and work in progress Reilly, Harrison, Duncan, Mercer, Thompson – download www.adhom.org).

3. Is it relevant in today's care? Who might benefit?

As the above spectrum of results show, homoeopathy can offer therapeutic options where:

- conventional care has failed or plateaued,
- or no conventional treatments exist,
- or they are contraindicated,
- or they are not tolerated from side effects,
- or where patients are reluctant to accept conventional treatment, perhaps from worry about side effects.

The two dimensions of care need considered - the direct effects of the remedy, and, the therapeutic impact of the *method* of approach to the patient. At times homoeopathy is supportive rather than curative and in addition to the specific effects it is worth emphasising the positive effects of the 'non-specific'/context/values' dimensions.

In addition many general practitioners (GPs) are now opting for homoeopathy as first line in certain problems, keeping the more costly and potentially risky conventional treatment as second line [22]. This will become increasingly common for homoeopathy and other complementary therapies. Some practical examples might help illustrate this trend:

- GPs and practice nurses can use Colocynthis for colic in infants under 6 months of age when no conventional drugs are available [22].
- The therapy can reduce allergic sensitivity [5, 6, 7, 8 and 22] (as conventional injections are now thought to be too dangerous)
- The complications of surgery can be reduced, e.g. by using Arnica cover at the time of dental extraction [23].
- Homoeopathy can offer useful care in degenerative illness where conventional care is often failing, for example in rheumatic illness (see Fisher's trials listed in ref 12), or
- in viral illnesses where no drug treatments exist, and
- in those instances of anxiety or depression when psychotropics are best avoided [22]. for example in 'stuck' grief reactions.

4. What can it not do? What are its limits?

The approach seems to rely on defense and self-regulatory responses, unlike the usual orthodox approaches of blocking body reactions or replacing deficiencies. This indicates its clinical scope: while it can help, at times resolve, conditions which are intrinsically reversible, the medicines cannot achieve things beyond the healing potential of the body – for example it will not help mechanical problems, deficiencies or irreversible breakdowns in body functions - where it is only palliative. So in conditions such as cancer it is unlikely to direct affect longevity, but it may help quality of life and symptom control. Where cells have been destroyed e.g. Islet cells of the pancreas in insulin dependent diabetes it will not work. The whole person approach is often generally helpful but vigilance is required for when an orthodox approach is also needed.

5. Is it able to be integrated with orthodox approaches?

As discussed above, clinical experience, backed by recent research, suggests a useful role for homoeopathy across the spectrum of medicine and professional disciples from primary care to tertiary care. The interprofessional postgraduate education programmes of Academic Departments of GHH has become the most popular postgraduate medical course in the UK, orthodox or otherwise. Over 20% of Scottish GPs have completed basic level training. Research has shown that 2 years after attending a foundation course 78% of attending doctors were still integrating elements of homoeopathy in their National Health Service care [22, 24]. The care programmes of GHH, and experimental linked clinics such as the Pain Relief Clinic and General Medical Clinic in the Glasgow Royal Infirmary, have demonstrated a similar capacity for integration at secondary and tertiary level care [25].

Our clinical trial programmes e.g. in asthma, suggests that a combination of orthodox and homoeopathic approaches can often enhance the care of a given patient. They can safely be used together. It is important that as complementary therapies become more popular that patients do not experience a fragmentation of

their care through an "either/or" mentality, placing them in positions of conflict between different therapies, or therapists.

6. Is it safe?

The therapy lacks the potential for life threatening side effects - a view accepted by users and critics alike. It can be used in pregnancy, and the extremes of life without harm. A prospective observational tracking of over 1000 acute prescriptions in primary care has recorded all adverse events at less than 2% (see Figure 3) [21]. Follow up case studies of these reports have not revealed any damaging reactions.

However, there can be an initial aggravation of symptoms which can be distressing, and although part of this is likely from the participants expectations, the controlled trials lend weight to the reality of this phenomenon [6, 8 26]. The healing reaction provoked by the medicine can also lead to a temporary recurrence of old symptoms.

Another risk is from unscrupulous individual or groups producing contaminated products. Stick to reputable manufacturers which follow their National Pharmacopoeias.

7. Is it professionally safe?

There is a possible danger in homoeopathy being misapplied, a risk not intrinsic to homoeopathy, rather to the given system of medical delivery in which it may be used. Homoeopathy is unique among complementary treatments in the UK in having an official place in the National Health Service, and a Faculty of Homoeopathy established by Act of Parliament to regulate its practice. Homoeopathy is only a therapy, it is not a system of medicine, and if misapplied by a therapist overstepping the bounds of their medical competence it can place the patient at risk. Thus the Faculty trains only statutorily registered health professionals, who must use the therapy within the accepted boundaries of their given professional competence and discipline. There are over 1000 members, licensed associates and associates in the UK, principally doctors, along with dentists, pharmacists, nurses, midwives, veterinary surgeons and podiatrists.

In March 1995 a new first level qualification of a Licensed Associate (LFHom) was introduced for candidates who had passed The Primary Health Care Examination [27]. This is an interprofessional qualification which enables the practitioner to offer patients and clients an informed view on the role, and the limits, of homoeopathy in their care, recommending specialist advice where appropriate, and applying simple application of homoeopathy within their discipline. An equivalent qualification is now offered by the American Board of Homeotherapeutics, and a European wide standard is being defined.

All doctors working at a specialist referral capacity in the UK must have passed the more advanced Membership examinations (MFHom) and gained further supervised clinical experience before going on the Faculty of Homoeopathy's Specialist Register. A nationwide network of specialists has now been created supplying local clinics to the standards defined in the Clinical Standards Policy produced by the Faculty of Homoeopathy [28].

Homoeopathy can also be practiced by common law right by any one in the UK, and although the organisations such as the Society of Homoeopaths are working towards achieving professional standards for non-statutorily registered practitioners, the situation remains unregulated.

8. Is it cost effective?

The main cost of homoeopathic care is in the increased practitioner time. The resultant prescription costs are minimal, in the UK NHS (National Health Service) on average less than 2 pounds (3 US dollars), and unit dispensing from stock is even more economical in dispensing practices and clinics.

Studies have shown a reduction in orthodox drug and procedure bills after the introduction of homoeopathy [23, 29]. As reported above (see Tables 1 & 2) we have found that one year after beginning specialist out patient care, 37% of patients have a sustained reduction in their conventional medications. The experience of GHH is that the all-too-common downward and costly spiral for many patients in conventional care of multiple specialist opinions and investigations can often be interrupted when a whole person approach,

using homoeopathy as the first choice drug therapy, is adopted. Certainly, the absence of significant side effects means that the costs of iatrogenic illness are significantly reduced.

9. Is it rational and scientific?

All medical care has its mystery and confusion, and homoeopathy is no exception. However homoeopathy compares very well to orthodoxy in the way in which history taking, drug selection and follow up is well systemetised and structured. In fact the PG education audit has shown the extent to which doctors find that even an introductory homoeopathic training can enhance the rational basis of their clinical perceptions and decisions.

The approach rests on a basic testable premise that drugs can helpfully modify disease processes when selected on the basis that in higher doses they would produce a similar physiological disturbance to the one that is to be treated. The analogy with allergen desensitisation and immunotherapy is well placed: the homoeopaths introduced the former with pollen therapy for hay fever, and presaged the latter.

The materia medica of the drugs prescribed in this way is developed from an experimental base, and while that work needs to be re-assessed, much of it is noteworthy. Indeed the homoeopaths were using placebo controlled clinical trials as early as 1911 as part of the technique of "proving", an on-going method for evaluating the prescribing indications for their drugs.

While there are conventional frameworks within which the counter-stimulant effect of homoeopathy can be understood (for example with the concept of hormesis), the action of the medicines which have been serially vibrated and diluted to extremes beyond likely biochemical effects presents far more of a challenge. The positive double blind trial results mentioned above force us to consider that these medicines have a greater than placebo effect: raising speculation on biophysical changes in the water used to make the medicine - an unproven idea for which some tentative theoretical and laboratory evidence exists [30] - a recent example, described in the Newscientist (7 November 2001) as a possible “first scientific insight into how some homoeopathy works”, discovered from studies on cluster-cluster aggregation phenomena in aqueous solutions that as you make a dilution more dilute there are almost instantaneous developments of very stable larger aggregates in the dilute solutions than in the more concentrated solution [31].

10. Is it progressing and contributing to medical advance?

New remedies and approaches are being developed, e.g. see the immunomodulation research in references 5to 8,and 2 and 3.

Innovations in computing and coding are making a contribution to the body of medicine - such as the influence on READ coding, and the developments at the University of Namur, Department of Informatics on expert diagnostic systems. Speculation on mechanisms of action are encouraging theoretical discourse, e.g. on the biophysical nature of dilutions [30].

More importantly, the approach is contributing significantly to the reintroduction of a holistic perspective in medical practice. The comments in Table 3 were made by practitioners who had completed the postgraduate foundation training [22].

Table 3: Influence Of Homoeopathy On Practice & Outlook:

The Views Of 40 NHS General Practitioners.

- "Relearned" history taking. (x 2)
- Listen more / less dismissive. (x4)
- Now find patients expectations for NSAIs, antibiotics, psychotropics difficult. (x4)
- Now want to refer patients.
- New outlook on chronic disease.
- More broad-minded in medicine in general.
- More aware of natural healing.

- Now see patient as a whole & not as much at cellular biochemical level.
- Now see people more as individuals & see the whole person for whom I seek a treatment.
- More aware of patient dissatisfaction with conventional medicine.
- It has saved my brain from fossilising.
- Rekindled interest in Clinical Medicine.
- Find practice richer & more fascinating.
- I marvel at my lack of knowledge .
- How did I manage without it?.
- Should be in undergraduate or GP training.

Ref 22

Practitioners report that even basic training in the subject can encourage a form of consulting which is therapeutic in its own right. This is now being studied by qualitative research and on-going work has shown significantly high 'enablement/empowerment' scores on exit from the consultations at GHH correlated with high levels of empathy established in the therapeutic encounter [32]. This in turn is stimulating medical educational models e.g. with patient centred teaching based around in-depth videoed consultations, taking account of the emotional and general physical aspects of health in tandem with the patient's local complaints. This has been used to enrich undergraduate education modules examining holism and human healing responses [33]. The field has developed important insights of relevance to the emerging field of psychoneuroimmunology, e.g. in seeing the relationship between emotional suppression and ill health.

11. Is it in demand by patients?

For years, whenever surveys are conducted, like the one by Grampian's Local Health Council in 1993 which stimulated that health authority's consensus assessment, they point to a sizable demand for homoeopathy. When Lothian Health Board in Scotland opened a new homoeopathic clinic in April 1994, within 4 weeks 40% of every GP practice in Lothian had referred a patient, and every practice had done so within 8 months. The demand at GHH is increasing (40% up on 5 years ago) and now averages 220 referrals per month, 87% coming from GPs.

Surveys from elsewhere in the UK suggest that around 75% of the public want complementary therapies in the NHS [34], and The Consumer Association surveys have shown a doubling of the use of complementary medicine by its members from 1986 to 1991 [35]. It has grown still further from then and studies across Europe [36] and in the USA [37] have similarly pointed towards a large, and growing demand for complementary medicine.

12. Is it meeting patients expectations?

Consumer surveys affirm that patients are in general satisfied, with 4 out of 5 users claiming significant benefit or cure, and 75% saying they would use complementary medicine again [35]. Our out patient surveys showed that 81% of patients rate the care as very good or excellent, and only 9% would choose to be treated only by conventional means in the future, the vast majority of patients would wish both forms of care to be integrated.

13. Is it in demand by doctors and health carers?

Surveys have suggested that around 3/4s of GPs want complementary therapies in the UK NHS. And as well as demanding clinical services, many are seeking training. When GP registrars views were sampled in 1982 over 80% expressed this view [38], and 5 years later the figure was over 90% [39]. This has now been borne out in practice. Doctors form the majority (85%) of the current 200 students either on the multidisciplinary PGEA approved postgraduate course in Glasgow, or its Distant Learning version, and the demand by other professions has increased in parallel.

Research at Glasgow University showed a very high demand for training by medical students, suggesting that this trend will increase further [40]. and the proposed curriculum for an undergraduate familiarisation course which emerged was adopted by the British Medical Association's report [41]. Several American medical schools now offer courses in Complementary Medicine. Hospital doctors have been less involved but some work now suggests that they have an as yet unexpressed interest [42].

14. Is it meeting practitioners expectations?

The rising referral rate from GPs, and the exponential rise in the numbers attending courses in the UK reflects the positive attitu de which many doctors now have towards this treatment. Practitioners are rating the treatment as useable and useful in NHS practice [22] with around 80% reporting continued integration of homoeopathy in their NHS general prac tice 2 years after attending basic training.

15. Is it in demand by purchasers and commissioners?

The traditional delivery of homoeopathy in the UK NHS has been sustained in the recent purchaser -provider environment. NAHAT (The UK National Association of Health Authorities and Trusts, a purchasing organisation) has reported in its Research Paper No.10 1993 that the vast majority of purchasers have a positive attitude towards complementary medicine including homoeopathy. Yet while some have increased purchasing, e.g. Lothian Health Board, this is uneven, and the patients of some health authorities are finding themselves on lengthy and growing waiting lists. It is a challenging reflection on the processes of decision making in this area to see the opposite conclusions being drawn from the same data by different authorities - each claiming their decisions are scientific.

Private insurance companies in the UK continue to pay for homoeopathy from recognised homoeopathic medical specialists.

16. Is it patients' entitlement?

The question of people's right to choose their form of health care is becoming more important. When we, and our carers, are well motivated and confident we respond better to the care we are given. Health care systems throughout the world a re now beginning to respond to the call for a more pluralistic and individualised approach to care, integrating traditional and contemporary approaches. In the UK, under parliamentary law, reaffirmed by questions in the House of Commons, homoeopathy must be supplied as part of NHS care and purchasers are free to meet the need in their area. The Select Committee on Science and Technology of the House of Lords affirms that *"We recommend that if a therapy whose mechanism of action is unclear does gain suffici ent evidence to support its efficacy, then the NHS and the medical profession should ensuren that the public have access to it and its potential benefits".* [43]

CLOSING REMARKS

The evidence mosaic for homoeopathy summarised here tends to re -inforce clinicia ns and patients reports of their experience that this approach can make a valuable contribution to patients' care, especially when applied with a whole person perspective, integrated with conventional knowledge. Now reports from the Scottish Office Departm ent of Health [44] and The Working Party chaired by HRH Prince Charles [45], have recommended further exploration of the integration of some complementary therapies, including homeopathy, more fully into health care. They have called for more support for educat ion and research in this area and recommended that purchasers " *endeavour to achieve a controlled exploration of the costs and benefits of integrating complementary medicine with conventional medicine….and should ensure that the service is accessible to all who need it. "*[44] .

C. Further Information & References

General Clinical Reading

1. Boyd H. Introduction to Homoeopathic Medicine.2nd ed. Beaconsfield: Beaconsfield Publishers Ltd, 1989.
2. Leckridge B. Homoeopathy in Primary Care. Edinburgh: Churchill Livingstone, 1997.

Basic Science

3. Bellavite P, Signorini A. Homoeopathy, a frontier in medical science: experimental studies and theoretical foundations. Berkley:North Altlantic Books, 1995. an new edition Feb 2002 - 'The Emerging Science Of Homeopathy: Complexity, Biodynamics And Nanopharmacology.
4. Ultra High Dilution Physiology and Physics by Endler & Schulte. Dordrecht: Kluwer Academic 1994.

Web & Library Services

5. A variety of information and support resources are available from the Faculty of Homeopathy and The British Homoeopathic Association - www.trusthomeopathy.org
6. Further academic and education materials available from ADHOM The Academic Departments of GHH on www.adhom.org which also has links to the library and reference services of Hom-Inform

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Address for Correspondence, Information on Courses and Updates
Dr Reilly can be contacted via the Homoeopathic Hospital at the address at the beginning of this article. Those readers interested in evaluating the subject can write to The Academic Departments at the same address for details of its training and distant learning evaluation course or visit www.adhom.org .

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1 Reilly D, Bawden S. Hospital Consultants' Views on Homoeopathy. J Roy Soc Med 1999;92:215.
[2] Reilly DT, Taylor MA. The difficulty with homoeopathy: a brief review of principles, methods and research. Complementary Medical Research 1988;3:70-78.
[3] Fisher P. Research in homoeopathy: an annotated bibliography. Updated versions available from Dr P Fisher, Royal London Homoeopathic Hospital, Great Ormond St., London WC1N 3HR.
[4] Reilly DT, Taylor MA. The evidence profile. Published in Developing Integrated Medicine. Complementary Therapies in Medicine 1993;1, Suppl 1. 11-12.
[5] Reilly DT, Taylor MA. Potent placebo or potency? A proposed study model with initial findings using homoeopathically prepared pollens in hay fever. Br Homoeopathic J 1985; 74: 65-75.
[6] Reilly DT, Taylor MA, McSharry C, Aitchison T. Is homoeopathy a placebo response? Controlled trial of homoeopathic potency, with pollen in hay fever as model. Lancet 1986;ii: 881-886.
[7] Reilly DT, Taylor MA, Campbell J, Beattie N, McSharry C, Aitchison T, Carter R, Stevenson R. Is evidence for homoeopathy reproducible? Lancet 1994;344:1601-06.
[8] Taylor MA, Reilly D, Llewellyn-Jones RH, McSharry C, Aitchison TC. Randomised controlled trial of homoeopathy versus placebo in perennial allergic rhinitis with overview of four trial series. BMJ 2000;321:471-6.
[9] Editorial:Anon. Reilly's challenge. Lancet 1994;344:1585.
[10] Hill C, Doyon F. Review of randomised trials of homoeopathy. Rev Epidem et Sante Publ 1990;38:139-147.
[11] Kleijnen J, Knipschild P, ter Reit G. Clinical trials of homoeopathy. BMJ 1991;302:316-23.
[12] Linde K. Are the Clinical effects of Homoeopathy Placebo Effects? A Meta-analysis of Randomised, Placebo Controlled Trials. Lancet 1997;350:834-43.
[13] Cucherat M, Haugh MC, Gooch M, Boissel JP, HMRAG. Evidence of clinical efficacy of homeopathy: a meta-analysis of clinical trials. Eur J Clin Pharmacol 2000;26:27-33. Full report: Homoeopathic Medicine Research Group. Report to the European Commission Directorate General XII: Science, Research and Development. 1996 Vol1. Short Version: Chapter 1-17. Pages 16-17. Also on CDROM from Hom-Inform:The Glasgow Homoeopathic Hospital.
[14] Long L, Ernst E. Homeopathic remedies for the treatment of osteoarthritis. Br Homeopath J 2001; 90:37-43
15 Barnes J, Resch KL, Ernst E. Homeopathy for post-operative ileus:a meta-analysis. Biomed Ther 1999;17:65-70.
[16] Day C. Control of stillbirth in pigs using homoeopathy. Vet Rec 1984;114(9): 216.
[17] Day C. Clinical trials in bovine mastitis using nosodes for prevention. Br Homoeopathic J 1986;75:11.
[18] Linde K, Jonas WB, Worke DMF, Wagner H & Eitel F. Critical review and meta-analysis of serial agitated dilutions in experimental toxicology. Human & Experimental Toxicology 1994;13:481-492.
[19] Demangeat JL et al. Modifications des temps de relaxation RMN (NMR). J Med Nucl Biophy 1992;16:135-45.
[20] Reilly DT, Duncan R, Leckridge B, Waddell D, Riley D, Edwards R. IDCCIM. International Data Collection Centres for Integrative Medicine. The University of Exeter 2nd Annual Symposium on Complementary Health Care. December 1995. (Report of early results. For recent update download www.adhom.org).
[21] Lewith G. Reilly D. Integrating the Complementary NHS Yearbook 1999 Pages 46-48. Publ. Medical Information. Reproduced from NHS Doctor and Commissioning GP. Summer 98:50-52.
[22] Reilly DT, Taylor MA. Postgraduate Education: a vehicle for evaluating CAM within contemporary medicine. & Review of the postgraduate education experiment. Published in Developing Integrated Medicine. Complementary Therapies in Medicine 1993;1, Suppl 1: 29-31.
[23] Feldhaus HW. Cost-effectiveness of homoeopathic treatment in a dental practice. Br Homoeopathic J 1993;82:22-28.
[24] Reilly DT. Clarifying competence by defining its limits. Lessons from the Glasgow Education Model of Homoeopathic Training. Complementary Therapies in Medicine 1995:3;21-24.
[25] Reilly DT, Taylor MA. Experimental integrated clinics. Published in : Developing Integrated Medicine. Complementary Therapies in Medicine 1993;1, Suppl 1:16-17.
26 Dantas F, Rampes H. Do homeopathic medicines provoke adverse effects? A systematic review. Br Homeopathic J 2000;89(Sup1):S35-8.
[27] Reilly DT. A Certificate of Primary Care Homoeopathy. Br Hom J 1994; 83:57-58.
[28] The Clinical Standards Document, Core Curriculum and Higher Specialist Training Documents can be obtained from The Faculty of Homoeopathy. See contact details at end of this article.
[29] Swayne S. The Cost and effectiveness of homoeopathy. Br Homoeopathic J 1992;81:148-50.
[30] Endler P, Schulte J,eds. Ultra high dilution physiology and physics. Dordrecht: Kluwer Academic, 1994.
31 Samal S. Geckeler KE Unexpected solute aggregation in water on dilution. Chem Commun., 2001;21: 2224-2225

32 Empathy is important for enablement Mercer, S. W, Watt, G. C M, Reilly, D.BMJ 2001; 322:865
[33] Edited by Helen Bryden. Human Healing: Perspectives, Alternatives and Controversies. Report on a Special Study Module for Medical Students, Glasgow University. Published by ADHOM 1999,Glasgow. Download www.adhom.org.
[34] MORI poll. The Times, London UK. 13 Nov 1989.
[35] Anon. Alternative medicine. Which Magazine Nov 1992:45-49.
[36] Fisher P, Ward A. Complementary medicine in Europe. Br Med J, 1994;309: 107-111.
[37] Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional Medicine in the United States. Prevalence, Costs and Patterns of Use. NEJM 1993;328(4):246-252.
[38] Reilly DT. Young doctors' views on alternative medicine. BMJ 1983;287: 337-9.
[39] Reilly DT, Taylor MA. Identifying the issues the profession's views. Complementary Therapies in Medicine 1993;1, Suppl1: 9-10.
[40] Halliday J, Taylor MA, Jenkins A, Reilly DT. Medical students and complementary medicine. Complementary Therapies in Medicine 1993;1, Suppl 1:32-33.
[41] British Medical Association. Complementary Medicine:new approaches to good practice. Oxford University press Oxford 1993.
[42] Reilly D, Bawden S. Hospital Consultants' Views on Homoeopathy. J Roy Soc Med 1999;92:215.
[43] Complementary and Alternative Medicine. Report of the House of Lords Select Committee on Science and Technology. HL Paper 123 Session 1999-2000 6th Report. London:The Stationery Office. P35
[44] A Report by the National Medical Advisory Committee. Scottish Office Department of Health. November 1996. Complementary Medicine and the National Health Service. An examination of Acupuncture, Homoeopathy, Chiropractic and Osteopathy. (Copies from: The Stationary Office. PO Box 276 London SW8 0031. UK +44(0)171 873 8200.)
[45]Integrated Healthcare: A Way Forward for the Next Five Years? Available from the Foundation for Integrated Medicine, 7th Floor Windsor House, 83 Kingsway, London WC2B 6SD UK. Phone +44 (0)171 242 3355.