

## Small but Intriguing- The Unfolding Story of Homeopathic Medicine

### BALANCING MEDICAL MATTERS - OPINION

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### Abstract

There are strong advocates and opponents to alternative medicine being widely available to the general population, whether this is over the counter or through the NHS. Indeed, if anything this area is increasingly becoming a major discussion point both medically and socially, especially with new constraints on budgets. In this balancing medical matters opinion piece, Dr Russell Malcolm outlines the unfolding story and background of homeopathic medicine and suggests that the medical and scientific communities should be less resistant to some of these interventions.

### Introduction to a topical debate

As I write this, the Royal Society of Chemistry has offered a cash prize to anyone who can explain why hot water freezes more quickly than cold<sup>1</sup>, while - in quite another part of London - a change to the consolidated Medicines Act threatens point-of-sale availability of homeopathic medicines. This move would not only threaten each patient's right of choice, but also threatens the economics of a small and highly specialised discipline. At present there are over 2000 unlicensed homeopathic medicines that many patients obtain under guidance by telephoning or emailing a homeopathic pharmacy.

Why should I mention two apparently coincidental and unrelated items of news? The first story underlines the gaping holes that exist in our understanding of water. Indeed, I am certain we would not be facing the second situation if we currently understood how high aqueous dilutions of specific substances evoke their specific biological effects. However, just like the freezing phenomenon in water, just because we haven't explained it yet, does not mean it isn't true.

### The Observed Phenomena- evolving science from empiricism

Homeopathy involves very small concentrations of an active material: a material that could under other circumstances give rise to serious systems disturbances. The science of toxicology already recognises the paradox that tiny exposures to toxins induce better tolerance in living organisms that are then exposed to higher concentrations<sup>2</sup>. Toxicologist Edward Calabrese and colleague Linda Baldwin did a survey of some 4,000 toxicology studies reported in science journals<sup>3</sup>. They found that about 350 showed chemicals had opposite effects at low levels. The actual prevalence could exceed that, as most of these studies weren't specifically designed to examine subtle effects at tiny doses<sup>3</sup>.

If this seems improbable - as it should to any critical mind - you might ponder on the fact that the inverse response curve that occurs in enzymatic reactions at low substrate concentrations also seems paradoxical and improbable and is not completely understood.<sup>3-4</sup> What is more controversial, however, is the idea that tiny doses of a specific material can induce a correcting response in an illness state.

### Controversy or heresy

Much of the controversy centres on the inescapable fact that water, as a diluent, must behave counter-intuitively in the way that it self-organises and preserves unique pattern-information from every active substance that is introduced into it. This is not so far-fetched when we consider that water is the organised medium that all our biochemical entities must traverse. This concept is important for our bodies to perform every improbable, three-dimensional docking manoeuvre with a specific target enzyme or receptor site<sup>5</sup>. Our very existence indicates the very real difference between improbability and impossibility.

### Debate or denial

The same individuals who limit themselves to early twentieth century models for the behaviour of water and low-dose phenomena, also decry the availability of homeopathy on the NHS<sup>6</sup>, on the basis that it 'cannot work'. Denial of these phenomena and the available research evidence is, of course, a matter of personal freedom, but to deny patient access means that you also have to dismiss the high levels of satisfaction expressed by patients who have received homeopathic treatment<sup>7</sup>.

A survey of over 23,000 outpatient consultations at the Bristol Homeopathic Hospital from November 1997 to October 2003 revealed that more than 70% of these follow-up patients (n=6500) recorded clinical improvement following homeopathic treatment (see Table 1)<sup>7</sup>.

Table 1:- Results survey of over 23,000 outpatient consultations at the Bristol Homeopathic Hospital (1997-2003)

Clinical condition	% follow-up patients showing clinical improvement
Asthma (under 16s)	89%
Chronic fatigue syndrome	72%
Crohn's disease/ulcerative colitis	76%
Depression	71%
Eczema (under 16s)	82%
Headache/migraine	74%
Irritable bowel syndrome	71%
Menopausal syndrome	77%
Rheumatoid arthritis	70%

### Arguments on cost

Those who are still outraged that public money supports this speciality might not realise that this entire skills-base, with two hundred years of cumulative data and experience behind it, costs the taxpayer less than our total annual spend on just one minor symptomatic medicine: (paracetamol elixir, given for infant fever).<sup>8</sup> However, at a time of increasing financial pressure, it is important to preserve and carefully evaluate any discipline, with a low cost base and high safety profile. The Swiss Health Technology Assessment (HTA) was commissioned in 2003 by the Swiss health Authorities with the objective of informing decision-making in Switzerland.

It concluded: *'There is sufficient evidence for the preclinical effectiveness and the clinical efficacy of homeopathy and for its safety and economy compared with conventional treatment'*.<sup>9</sup>

In another study, indicators of hospitalisation and drug use were obtained from the Health Statistical Document System of Tuscany<sup>10</sup>. Investigators compared users of homeopathic services with the general population. The study showed that the homeopathic patients used fewer drugs than the reference population. A significant decrease in drug use was also found on comparing the same patients before and after homeopathic treatment. Hospitalisation indicators also tended to favour patients who had received homeopathic treatment, although the latter observations were not always statistically significant. Perhaps we should consider the effect on the health care budget if homeopathy was able to achieve a reduction in requirement for medication across the board. Consider the change recorded in this testimony by a patient with rheumatoid arthritis<sup>11</sup>.

### **Stakeholders, interests and ideologies**

Does it matter? This depends entirely on whom you pose the question to. Research organisations, manufacturers, R&D funding bodies, academic departments, teaching programmes and professorial chairs are almost all dependent on the economics of the patentable device or molecule. Indeed, there is so much investment of time, money and energy in biomedical models for healthcare, that there is understandable wariness of physicians like me, who although we choose to work within conventional diagnostic models, also wish to retain the freedom to recommend natural (and therefore unpatentable) treatments that lie outside the bounds of conventional therapeutics.

Professor Sir Peter Rubin recently made the following pronouncement in an open letter to the Britain's registered doctors<sup>12</sup>:

*'Doctors - whatever our area of practice - must synthesise conflicting and incomplete information to establish a diagnosis; we must deal with uncertainty and often work off-protocol; we must manage risk; we must accept responsibility for actions.'*

### **Professional Choice**

This freedom of every doctor to think for themselves, rather than merely to apply protocol is a defining attribute for what it means to be a professional and those who study homeopathy find that they are enabled to do just that.

Homeopathic practitioners interview the patient from an openly individualised perspective; then model the signs and symptoms either diagnostically or phenomenologically. They are then in a position to select treatments which either manage the patient's symptoms conventionally, or facilitate adaptive change and healing with a homeopathic stimulus. These treatment choices can be complex and may involve computerised searches for a homeopathic 'systems-matched' remedy, in addition to more traditional investigative measures.

So why would I spend my working life in a difficult and misrepresented speciality? Firstly, because the results for the patient can be life-transforming. Secondly, the outcomes, materials and practices are both sustainable and unconditional. Thirdly, the learning process for the homeopathic physician is one that liberates them to observe, interpret and alter biological phenomena using facilitatory methods that contrast significantly with orthodox practices.

In the words of Dr Jeremy Swayne: 'Whether homeopathic medicines are active or not, the homeopathic approach is a powerful mediator of non-specific therapeutic effects. The

process and outcome of homeopathic interventions provide an exceptional opportunity to study the role of specific and non-specific factors in treatment.<sup>13</sup>

Before learning about homeopathy I often found myself juggling with the operational constraints that are inherent in many of our treatment protocols and systems of healthcare delivery. 'Evidence-constrained medicine' and a widespread shortfall in the education and practice of preventative medicine, means that many patients are stuck in one medical paradigm, remaining both symptomatic and incompletely 'managed' with ever lengthening drug-lists.

I would ask those readers who have worked in, for example, rheumatology or gastroenterology to consider how difficult it can be to get any useful response at all - placebo or otherwise - in many chronic cases, without recourse to steroids or immunosuppressants. Don't ask a pharmacist or an academic, but ask the clinician sitting in front of his most intractable cases in the pain clinic week after week. Why should the homeopath suddenly achieve a 'placebo' response<sup>14</sup> in patients who have been failed by a combination of expensive high tech treatment and appropriately red coloured pills for years? And why should recently introduced case analysis methods result in an improvement in response rates to homeopathy, if the phenomena are placebo generated<sup>15</sup>?

Although chance and pure coincidence can never be ruled out, many clinical responses to homeopathy are sometimes so improbable<sup>16</sup>, that it demands complete ideological blindness not to be curious. If, however, the effects of homeopathy were all to come down to the placebo response, then every conventional doctor really needs to learn the trick, because these outcomes represent safe, inexpensive and clinically valuable phenomena. Remember however, that animal studies and meta-analyses of homeopathy do not support a predominantly placebo dependent effect<sup>17</sup>.

### **Impossible, or merely implausible from our current standpoint**

Critics of homeopathy, draw a line in the sand about the action of the remedies by hammering on about the *impossibility* of a pharmacological effect from very low doses of an active substance. Homeopathic physicians have never claimed that these remedies work on the basis of a conventional 'lock and key' model. To say, however, that there is nothing active in any homeopathic remedy is both disingenuous and misleading. Many remedies are used at concentrations akin to pituitary hormones, botox and certain vaccinations.

Those same critics in their appraisal of ultra-molecular dilutions ignore the data available within the HomBRex database (database of basic research experiments on homeopathy indexes studies on biological systems). This includes 830 experiments employing ultra-molecular dilutions. In 745 of these (90%) at least one positive result was reported. Animals represent the most often used model system (n=371), followed by plants (n=201), human material (n=92), bacteria and viruses (n=37) and fungi (n=32).<sup>19-20</sup>

Advances in basic science are elucidating phenomena in water that hitherto we haven't dreamed of including exclusion zones at surface interfaces that are thousands of molecules thick, electrical gradients across these zones due to the movement of protons, energy gradients due to the effects of light, and polarity gradients around solute molecules which affect their spatial orientation<sup>19-20</sup>. In the words of Professor Brian Cox *'It is the resistance to new ideas that actually leads to confusion, not the inherent difficulty of the ideas themselves, because the real world does not behave in an everyday way.'*<sup>21</sup>

## Balancing risk and benefit in medicine

The Hippocratic Oath has been quietly (and conveniently) shelved in the medical graduation ceremonies of most British Universities. It is simply too much to ask doctors, it seems, to put their hand on their heart and 'firstly do no harm' while placing the National Prescribing Formulary in their other hand. Yet, this fundamentally important principle would be a perfectly realistic expectation for a medical homeopath, yesterday, today and tomorrow.

'Prescriber power', however, is the battleground of both medical ideology and commerce - and we should be under no illusions about the implications this has for the content of our undergraduate medical curricula, the priorities for research funding and the availability of treatment. The issue of availability brings us back to the current proposed changes to the consolidated Medicines Act. The desire of some to restrict the availability of homeopathy cannot be fully accounted for by shortcomings in the evidence base for homeopathy. After all, there are many conventional treatments that are applied every day on the basis of incomplete evidence.

Mary D., whose testimony you can hear for yourself<sup>22</sup>, bought a homeopathic treatment for herself, across the counter of her local homeopathic chemist, in treatment of longstanding symptoms of Sjögren's syndrome. She then observed and reported an improvement that exceeded everything else that she had tried over the years. Mary's response is a fact. And like tens of thousands of other comparable experiences around the world, was attended with objective physical and physiological changes. Although the indications for her chosen treatment are not yet fully validated, there is also no evidence that self-prescribed homeopathic treatments, like Mary's, are not safe to use.

To its critics, however, homeopathy must surely represent such a *danger* to the public that it must be put beyond reach of anyone who is not in receipt of a prescription! Yet, in over twenty-five years of homeopathic practice I do not recall hearing of a single death directly attributable to an over-the-counter homeopathic prescription. Contrast this with the 100-200 people that are known to die every year in the UK from paracetamol that was freely bought over the counter without prescription<sup>23</sup>. If paracetamol is not an elephant in the committee room of drug regulation, I really don't know what is. In my lifetime, paracetamol has killed a population approximately equivalent to that of St Andrews.

This raises serious questions about what is motivating the movement towards regulatory changes which restrict access to homeopathy: surely a sledgehammer to split an atom.

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### **Further Reading**

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