‘Homoeopathia! Quo vadis?’

Rome, 5-7 June 2015:
The 2nd HRI International Conference on homeopathic research

by Lionel Milgrom PhD CChem FRSC LCH MARH

The Roman Empire has always fascinated me – its rise; its fall; how similar, yet how different to our modern world it was, and how – for better or worse – many of its ideas, institutions, even technology still survive in one form or another. In its heyday, it stretched from the Pillars of Hercules in the west – modern Straits of Gibraltar – to the Euphrates and the Persian Gulf in the east. Its relevance will, still survive in one form or another. Consequently, getting to the conference was the very opposite of successful first. One thing was certain; Senate and People of Romanus; Praecursio: ‘Omnes viae Romam ducunt’ (Introduction: ‘All roads lead to Rome’) Rome: The Eternal City … and yes: once all roads did lead to it. A fitting venue, then, for a veritable homeopathic ‘horde’ to descend upon, bent on celebrating the HRI’s 2nd International Research Conference. And descend on Rome they did … from all corners of the Empire – sorry, world – they came: homeopathic researchers from all over Europe, Arabia, Africa, Australasia, India, the Americas (North and South), and from way beyond Rome’s old Eastern frontier in Mesopotamia, even far Cathay sent an emissary of around 30 of Hong Kong’s finest.

As Pontifex Maximus, Il Papa presides not only over millions of Catholics worldwide but also over what’s left of the old Roman Empire in the West, namely Vatican City. The title Pontifex Maximus (‘great bridge builder’) refers to the miraculous powers of Roman concrete in, eg, setting under water, and originated in ancient Rome for the leading priest of the Republic, and later Empire. In its heyday, it stretched from the Pillars of Hercules in the west – modern Straits of Gibraltar – to the Euphrates and the Persian Gulf in the east. Its relevance will, still survive in one form or another. Consequently, getting to the conference was the very opposite of successful first. One thing was certain; Senate and People of Romanus; Praecursio: ‘Omnes viae Romam ducunt’ (Introduction: ‘All roads lead to Rome’) Rome: The Eternal City … and yes: once all roads did lead to it. A fitting venue, then, for a veritable homeopathic ‘horde’ to descend upon, bent on celebrating the HRI’s 2nd International Research Conference. And descend on Rome they did … from all corners of the Empire – sorry, world – they came: homeopathic researchers from all over Europe, Arabia, Africa, Australasia, India, the Americas (North and South), and from way beyond Rome’s old Eastern frontier in Mesopotamia, even far Cathay sent an emissary of around 30 of Hong Kong’s finest.

The 2nd HRI International Conference on homeopathic research

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But, caveat emptor, dear reader! As with my previous reportage of the 1st HRI Research Conference in Barcelona 2013 (Milgrom, 2013), this one will be highly personal and idiosyncratic, as my main interest has always been in fundamental research. The Latin title of this piece (which means, ‘Homeopathy! Where are you going?’) reflects my feelings during and after the conference. As usual, however, I’m getting ahead of myself … Of course, this being the second HRI Conference, a question on many minds was how it would compare with the brilliantly successful first. One thing was certain however. When the current Roman pontiff, Pope Francis, decides to go walkabout, the resulting congestion means that Rome grinds to a halt. Consequently, getting to the conference was the very opposite of Roman efficiency. It took longer to travel the 31 km from Fiumicino airport into Rome than it did to fly from Luton. Wish I’d taken the train …

I eventually pitched up at the conference hotel – the magnificent Radisson Blu, situated (it has to be said) in one of the seedier parts of town, next door to Rome’s main railway station, and a short ten minutes forced march from the Coliseum – only to find I had somehow forgotten to book myself a room! Assumption, it is said, is the mother of all screw-ups. A moment’s panic (visions of sleep- rough on a station platform) and a science writer for over 30 years and came into homeopathy to ‘find out how it works’. Heading up the Programme for Advanced Homoeopathic Research, he has over 170 publications in both the scientific and GAM academic literatures on his ideas, including many rebuttals of the so-called ‘sceptical’ case against homeopathy. He wishes he’d trained as a mathematician, jazz / concert pianist, and Ninja warrior.
Augury was the ancient Roman practice of divining the future (that is, the will of the gods) from the flight of birds. It was generally performed (known as taking the auspices) before any new (usually belligerent) venture the Roman state had decided upon. We find remnants of this practice today in words like ‘auspicious’ and ‘inaugurate’. SPQR (Senatus Populusque Romanus; Senate and People of Rome) was an inscription carried on all Roman eagle battle standards.

Stuka (= acronym for Sturzkampfflugzeug, or ‘diving fighting aeroplane’) was a German dive-bomber, much feared by armies and civilians during the early stages of WW2. Ironically, its wings looked like those of an inverted gull’s and, as it attacked, let out a terrifying high-pitched scream, courtesy of the effect of airflow over its dive brakes.

Roman seagulls (identified by ‘SPQR’ stamped on their wings). Take your eyes off your brekkie for a second, and in they’d swoop, screaming like a gaggle ofavian stukas, to snatch the lot. Consumed in one gulp while ruining what was left of the table, they would then casually preen themselves in the pool, awaiting the next unsuspecting diner. Being the 75th anniversary of the Battle of Britain, your correspondent stoutly defended his bacon and eggs with a triple-A barrage of frantic arm waving, foul language (sic) and assorted cutlery …

And so the auguries proved correct. During conference registration that first day, it was announced that one of the main speakers, Dr Stephan Baumgartner, would not after all be attending. Why this might have been distressing, goes back to what happened during the first HRI Conference in Barcelona in 2013 and one of the reasons I went to Rome in first place: in short, the announcement of the discovery of a possible homeopathic ‘field effect’.

Thus, it seems that when certain plant seedlings are stressed by poisoning with arsenic, this can be ameliorated using Arsenicum album in potency, compared to potentised and unpotentised water. But what else had been noticed was that the water-control seedlings were also affected depending on how far they were from the potentised Arsenicum album-treated plants. In other words, the remedy appeared to be exerting a curative ‘field effect’ that stretched some distance from its point or seedling of application, affecting others in its path.

What has always interested me, however, is the fundamental research side
It could be argued that, if confirmed, the discovery of such a field effect would be the homeopathic equivalent of physicists’ current Holy Grail: finding the long sought-after Higgs boson. Consequently, those of us interested in this aspect of homeopathic research were ultra-keen to get the latest intel on field-effect progress over the last two years. Sadly, though, this was not to be and, I have to admit, it temporarily (and unfairly) clouded my judgement about how this 2nd HRI conference might shape up compared with the first.

You see, I was forgetting that what the first HRI conference in 2013 did so brilliantly was to open up homeopathy and the world to just the sheer volume, variety and fun of homeopathic research. At the time, I wrote that ‘I felt like a kid let loose in a toystore …’. But the still-controversial nature of much homeopathic research (as viewed from within the conventional scientific/biopharma paradigm and ‘establishment’) means that, for the time being at least, it is highly unlikely to achieve the funding levels conventional science receives or (other than pejorative) media exposure. And whereas two years is usually time enough to achieve results / arrive at conclusions in most conventional scientific research, it is so much more difficult when it comes to homeopathy.

This isn’t just about the amount of funding for homeopathic research (minuscule compared to that spent researching conventional drugs), but also has to do with its intrinsic difficulty, especially when trying to reproduce the results of ground-breaking experiments on ultra-diluted substances, such as those on the possible ‘field effect’.

So, if the first HRI conference was noted for the sheer volume and variety of homeopathic research on offer, so the second (rather like the consolidation of the Roman Empire after Trajan) will perhaps be remembered more for the added certainty of results obtained so far, and less for the announcement of new headline-grabbing discoveries. This might also explain the conference’s bias more towards clinical studies and provings – the ‘what’ if you like, of homeopathy, that the remedies actually do what they say on the bottle – rather than fundamental research – the ‘why’ and ‘how’ our medicines ‘work’. What has always interested me, however, is the fundamental research side, so I make no apologies for concentrating on that here.

‘Ave, Caesar! Morituri te salutant!’ (‘Hail, Caesar! Those who are about to die salute you!’)

And so the first morning’s plenary session (with almost the same title as Barcelona 2013 – ‘Homeopathy Research – State of Play and the Way Forward’) got underway with a round-up from Professor Paolo Bellavite and Dr Klaus von Ammon. Anyone expecting the huge global sweep taken at breakneck speed of Dr Peter Fisher’s (Clinical Director and Director of Research at the Royal London Hospital for Integrated Medicine, née, the Royal London Homeopathic Hospital) account at Barcelona might have been disappointed. Prof Bellavite concentrated more on his own and other’s research on basic homeopathic principles using animal models (Bellavite et al, 2006).

Animal-based research is integral to conventional modern drug development, but extrapolating from animals to humans is problematic. Based on provings and clinical confirmation of the Law of Similars in humans, homeopathy should escape this shortcoming. It doesn’t: homeopathic and medical databases indicate animal-based homeopathic research includes physical and psychological conditions which can involve procedures that cause moderate to severe suffering to experimental animals (Britton, 2003).

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This time, however, there was none of the controversy over the use of animals in homeopathic research that caused such a stir at Barcelona, even though at least five other research presentations in Rome used animal models. In addition, an argument that almost developed later on in the Conference (concerning single remedy prescribing vs. polypharmacy) was rapidly nipped in the bud by the Chair. Somehow, it seemed, the usual homeopathic propensity for inter-necine strife (incidentally, one of the main factors that ultimately destroyed the Roman Empire – homeopaths, be warned!) had been efficiently filtered out.

Some might certainly think that no bad thing. That said, one could legitimately ask whether the use of animals in homeopathic research really is about homeopathy, or is it simply about the effects of serial dilutions? While perhaps a debate for the next HRI conference, to be fair this second HRI conference was well sprinkled with talks on provings, clinical research and homeopathic methodology. So, note to the conference organisers: should the task for future conferences be to ensure that these different branches of research into homeopathy continue to be seen as complementary and not inimical to each other? Given the depth of feeling in some parts of the homeopathic community about the use and value of animal research, this might prove difficult.

So, while not disputing one of the major cornerstones of homeopathy – that it is the whole clinical picture of the individual patient which needs to be taken into consideration – Prof Bellavite believes the kind of animal-based basic research protocols used in conventional biomedical research, allows the actions of drugs, including homeopathic remedies, to be investigated in rigorously and reproducible settings. If so, then Prof Bellavite’s presentation threw up an interesting suggestion concerning how homeopathic remedies might be operating. This is based on the differences between what is known in biochemistry as allosteric and orthosteric control of drug binding sites, and it requires a bit of explanation (De Smet et al, 2014).

The current theory of drug action proposes they bind to proteins on and in cell membranes.
These proteins are large flexible molecules that change their conformation as they interact with a variety of substrates. The resulting conformational change is thought to act as a signal for various biological responses. However, there are several ways a substrate can interact with the protein to produce, or indeed diminish a response (see Figure 2 above).

Figure 2 is a schematic representation of a cellular receptor becoming activated by binding its orthosteric ligand, thereby inducing a later response. Cellular receptors can be targeted by means of orthosteric inhibitors (above, left) or allosteric modulators (above, right). Orthosteric inhibitors contain two major types of molecules, namely (i) ligand traps, which prevent ligand binding to the receptor or (ii) competitive antagonists, which compete for the same binding site on the receptor; both inhibitors eliminate the entire later response of the receptor. In contrast, allosteric modulators can modify receptor function in various ways while still allowing the possibility of orthosteric agonist binding: they can change the affinity of the orthosteric ligand for the receptor (‘affinity modulators’), they can induce a structural change in the receptor that alters the cellular response upon orthosteric ligand binding (‘efficacy modulators’), or they can modify a later response independent of an orthosteric ligand (‘allosteric agonists / inverse agonists’) (De Smet et al, 2014).

This is illustrated in more detail in the series of diagrams for the GPCR family of proteins in Figure 3 below. These are trans-membrane proteins that sense molecules outside the cell, then induce signal transduction and, ultimately, responses inside.

Orthosteric agonists (chemicals that bind to receptors and activate them to produce biological responses) bind to the G protein-coupled receptor (GPCR), which induces a conformational change resulting in activation of later signalling. Positive allosteric modulators are ligands that bind to a different site to the orthosteric agonist, so enhancing the latter’s affinity (cooperativity factor-a) and / or efficacy (modulation factor-b). Negative allosteric modulators, on the other hand, are ligands that decrease the affinity (cooperativity factor-a) and / or efficacy (modulation factor-b) of the orthosteric agonist. Allosteric ligands that have no effect on the affinity and / or efficacy mediated by the orthosteric agonist are termed neutral allosteric ligands. The grey arrows denote allosteric interaction of the modulator with the orthosteric ligand; black arrows denote allosteric interaction between the ligand binding sites and the effector binding site within the GPCR, resulting in later activation of signalling pathways (known as orthosteric agonism) (Wooten et al, 2013).
FEATURE

What Bellavite suggests is that homeopathic remedies might work by exploiting the characteristic features of allosteric (as opposed to orthosteric) regulation. If so, then it becomes possible to explain homeopathy along conventional scientific/pharmacological lines. Some might consider this a great leap forward and a necessary and sufficient condition for homeopathy to become more generally accepted. Personally, however, I have my doubts as there could be problems with the currently accepted model of molecular signalling in cells—that substrates and their receptors need to be in direct physical contact to generate a biological response. This was first questioned by Professor Jacques Benveniste (Thomas et al., 2000) then rejected (Jonas et al., 2006), but has since resurfaced with ground-breaking work on electro-magnetic signalling from bacterial DNA sequences (Montagnier L. et al., 2009) and in other studies involving the sense of smell (Franco et al., 2011). These suggest substrates and receptors are indeed interacting with each other, but through space (action at a distance— which would require some kind of field effect ...), and that they do not have to be physically in contact for the signal to be triggered. Needless to say, Professor Benveniste's name is now NEVER mentioned in this context ...

Which brings us back to the second speaker of the first morning, Dr Klaus von Ammon. In attempting to explain the clinically observable facts of homeopathy, he harked back to Hahnemann’s description of remedy action in the Organon as ‘spirit-like’, which he took to mean ‘non-material’. So, contrary to the notion of a biochemical, material mechanism for the action of homeopathic remedies, Dr Ammon considers a more ‘immaterial’ mode of action, based on observations made during consultation. Certainly ideas of some kind of macro-quantum-style entanglement between patient, practitioner, and remedy might be thought to fall under such an overarching account (see later). But if they were, Dr Ammon didn’t mention them. He seemed more preoccupied with what he called ‘non-material application of potentised substances’, mentioning in this

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Homeopathy in practice Summer 2015
There is still a long way to go in fully understanding all these field effects
A person) and the linked problems of polypharmacy, adverse drug reactions, plus antimicrobial resistance being some of the biggest problems facing the developed world. There is now evidence that integrating homeopathy into primary care reduces prescriptions of potentially harmful medications in upper respiratory infections (dealt with later by Prof Jennifer Jacobs and Petra Klement) and musculoskeletal conditions. Also, homeopathy is proving to be a useful adjunctive treatment in the developing world against malaria and drug resistant TB.

If only there had been a Guardian journalist in the house to phone all this stuff back to his or her news desk. Sadly, however, journalists were conspicuous by their absence. Not even Edzard put in an appearance (as if...). So a take-home message from this conference might be that as an interconnected global community, and in as intelligent, coordinated and non-partisan fashion as possible, we really need to start seriously pumping out the positive news about homeopathy. As Dr Fisher put it:

If homeopathy is to realise these opportunities to contribute to public health, a clear and focused strategy is required. Networks and collaboration must be developed, irresponsible and speculative claims must be avoided (what could he mean ... ?!! Author). Instead we should concentrate on well-established treatment strategies and explore the potential of constitutional treatment in multimorbidity, treating people as individuals with complex health problems, not as multiple diseases each to be treated with different and often multiple drugs.

Amen to that! Though my guess is that the push for this most likely won’t come from the UK and probably not even Europe (well, given its current problems, Greece perhaps); it will most likely come from the developing world; India, Africa, South America and so on, places where expensive drugs are less available and homeopathy seems to be better valued (Milgrom et al, 2011).

The day finished with Professor Jennifer Jacobs talking about a couple of RCTs of homeopathy in childhood respiratory illnesses, some poster talks, and then a well-watered (that is, with alcohol) poster session in the open air. I had two in the session, so was kept rather busy explaining myself, and just about managed to shower and change in time for a slap-up meal in a Roman restaurant (more pasta). And I’ve only barely managed to cover the events of the first day! The next two days followed a similar mix of clinical and fundamental research (biased towards the former), so, what follows are what I consider to be some of the standout moments from the rest of the conference.

‘Alea iacta est’ (‘The die is cast’ – reputedly spoken by Julius Caesar when crossing the Rubicon)

The second day kicked off with a session on lab-based research and mechanisms of action. For me, the most interesting presentation – and biased as I am, arguably of the whole conference – came from Dr Steve Cartwright, a veteran of Barcelona and who, like me, is a chemist. He was following up work he presented two years ago on the use of special dyes as molecular probes of ultra-diluted successful solutions.

These special dyes exhibit a property called solvatochromism, which means their colour depends on what solvent they are dissolved in. Thus in polar solvents such as water, they might be one colour, while in less polar solvents such as acetone, they will be another colour (chem-toddler.com). From the point of view of Steve’s work, this isn’t as important as the reason why they exhibit this property.

It is because the molecules are inherently dipolar, that is, they have positive and negative charges at their opposite ends (so they are called zwitterions), and this dipolarity can change as the molecules absorb light energy photons; that is, they become excited (the symbol ‘hv’ in Figure 4 represents this absorption of a photon on excitation).

There is now evidence that integrating homeopathy into primary care reduces prescriptions of potentially harmful medications in upper respiratory infections.
Thus far is standard chemistry. Now we come to the exciting bit. For what Dr Cartwright’s latest work reveals is that homeopathic potencies can change these red and blue shifts in a measurable way and that these potency-induced changes are not dependent on which solvent the dyes are dissolved in. Thus, whether aggregation is enhanced or diminished by potency, depends upon the pre-existing level of dye ordering in solution. Dyes that are excessively ordered have their levels of order reduced by potency, while dyes that are excessively disordered have their level of order increased, and these potency-induced changes can be observed in their UV/visible spectra. So, it appears something that, according to sceptics, cannot possibly have any effects, let alone a curative one (i.e. a substance whose molecules are supposedly dissolved in water and speculative claims must be avoided (what could he mean …??!!)).

What all this suggests is that the IET feature of solvatochromic dyes appears to be essential for dye-potency interactions to take place; ordinary (non-solvatochromic) dyes show no change in their spectra in the presence of potencies. Most importantly, what Dr Cartwright’s work suggests is that, as the IET constitutes an oscillating dipole, potencies in turn may also be oscillating dipoles and that interaction occurs through electron resonance. Also, because similar results are obtained regardless of solvent polarity, potencies appear to be interacting directly with these dyes.

Dr Cartwright thinks if potencies are indeed oscillating dipoles, then it might even be possible to observe them directly via their fluorescence. Also, using the timescale of spectroscopic changes seen with these solvatochromic dyes might provide a means of differentiating between remedies, particularly if they are fast acting (e.g. Aconite) or slow acting remedies (for example, Alumina). Hopefully, we will not have to wait until the next HRI conference to hear of Dr Cartwright’s latest breakthrough.

‘Ipsa scientia potestas est’ (‘Knowledge itself is power’) Simple as Dr Cartwright’s system might appear, his work highlights a problem that dogs much of homeopathic research: reproducibility. It is the democratic principle by which sceptics live and breathe, and like all democracies, this principle may well be – probably is – fundamentally flawed. For science might indeed be ‘democratic’ but, historically, she has also proven herself a harsh, unforgiving, narrow-minded dominatrix; the fate of the late lamented Professor Jacques Benveniste being a case in point (that some of his research has in fact been reproduced, and that this has not been aired as vociferously as his condemnation and defenestration back in the 1980s, is nothing short of scandalous).

So it was good to listen to Professor Christian Endler expound once again, updating earlier work on many different basic research studies of high homeopathic potencies that have been subjected to internal (i.e. reproduced in the same lab), multicenter, and independent repetition. Naturally, he mentioned his own work on the use of potentised Thyroid to slow down the metamorphosis of tadpoles into frogs, which has now been reproduced many times (Weber et al, 2008).
Professor Endler had earlier shown that, when it comes to internal repetitive studies, 69% reported effects comparable to that of the initial study; 10% different effects, and 21% no effects. However, independently performed studies reported 44% comparable effects; 17% different effects, and 39% zero effects, suggesting either slight site difficulty in performing lab-based homeopathic research, and the latest data he reported merely confirms this. So the work of repetition is ongoing, although it is encouraging to see that, in the main, reproducibility is in homeopathy’s favour.

We come now to a subject that I am surprised I had not given more serious consideration to in the past: at what level in the body are homeopathic remedies working? There had been talk that homeopathic remedies could be working at the genetic level, influencing the over-expression of genes of stressed organisms, e.g. plants. So it was a revelation to listen to Dr Giovanni Dinelli of the University of Bologna deliver his talk on Different approaches to homeopathic basic research.

One of the basic models used in lab-based homeopathic research is the ‘stress’ (that is, poison) wheat seedlings with arsenic and then see how germination is affected by potentised Arsenicum (As₂O₃ 45x) (for a general introduction to this subject, see positivehealth.com). The latter leads to a significant increase in germination rate of the stressed seedlings, compared with control. It turns out that after poisoning with arsenic around 700 genes are over-expressed, and that potentised Arsenicum leads to a reduction in this over-expression, especially among the 59 signal transduction genes.

Interestingly, a talk by Dr Debora Olioso from the University of Verona tended to bear out Dr Dinelli’s findings, using that good old homeopathic workhorse, Arnica montana. Her results (in collaboration with Prof Bellavite) indicate that different homeopathic dilutions of Arnica might well be working by modulating gene expression of several cytokine and chemokine protein messenger molecules and their cellular receptor sites, that are ultimately responsible for the body’s inflammatory processes (positivehealth.com; Bellavite et al, 2015).

Given that multimorbidity, polypharmacy, adverse drug reactions, and antimicrobial resistance are some of the biggest health problems currently facing the developed world, the evidence for homeopathy’s beneficial effects operating at the cellular and genetic levels makes Dr Peter Fisher’s pugnacious call for integration of homeopathy into primary health care all that more urgent.

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‘Per ardua ad astra’ (‘Through adversity to the stars’)  
The perhaps measured and reflective tone of this second HRI Conference made it fitting that the speaker to close the proceedings on the last day was Dr Robert Mathie from the British Homeopathic Association.

While we might disagree on the value of the randomised controlled trial (RCT) (Cartwright et al, 2010), particularly when applied to CAM in general and homeopathy in particular (Milgrom, 2014), it has to be said that, for better or worse, the RCT is still regarded by many as the ‘gold standard’ by which the efficacy of any therapeutic technique is judged. From that standpoint, there is no better person qualified to rigorously assess the RCT evidence for homeopathy, and to pronounce judgement on its efficacy (Edzard Ernst, please take note).

Back in 2013 at Barcelona, Dr Mathie presented work with an international team on developing model validity (MV) for homeopathic RCTs (MV tries to ensure concordance between a study design and state of the art clinical practice for an intervention under investigation). After exhaustively searching the homeopathic literature, only 32 RCTs of individualised homeopathy could be found that satisfied the strict inclusion criteria for that study, 19 of which were ‘acceptable’, 9 ‘uncertain’, and 4 of ‘inadequate’ MV (Mathie et al, 2015). In rounding off this 2nd HRI Conference with his talk on ‘Systematic review and meta-analysis of randomised, placebo-controlled trials of individualised homeopathic treatment’, Dr Mathie once again did not disappoint.

Unusually, he began by giving us all the good news first; that the key inference from his team’s latest study is that there are positive results from RCTs of individualised homeopathic treatment that are potentially crucial in defending and promoting homeopathy as a clinically effective therapy.

Although the evidence base from RCTs of homeopathy might not be sufficient, Dr Mathie pointed out that most previous systematic reviews / meta-analyses on homeopathy have not properly explored:

- Study quality (including internal validity and reliability of evidence)
- Size of treatment effect (and the difficulty in replication)
- Whether the literature explored is peer- or non-peer reviewed
- Whether the homeopathy under review is individualised or non-individualised (whether the whole system of medicine is being explored or just the drug)
- The quality of the homeopathic intervention / outcome measure (model validity)
- Whether the trial is dealing with homeopathic treatment or prophylaxis, and
- What medical conditions are being investigated.

So Dr Mathie and his team began their investigation with a hypothesis: For the spectrum of medical conditions that have been researched using relevant RCTs, the main clinical outcome of individually prescribed homeopathic medicines is distinguishable from that of corresponding placebos.

In other words, individually prescribed homeopathic medicines have specific effects.

Applying the same rigour as the earlier work, the impact of trial internal validity (that is, risk of bias) identified 12 trials (right side wedge in Figure 5) that did not have high risk of bias. Of these 12, there were 3 trials that satisfied the authors’ criteria for ‘reliable evidence’ (Mathie et al, 2014). Meta-analysis identified a small, statistically significant, odds ratio for the N=22 overall and for just the N=3 with reliable evidence.

Incorporating MV into the quality appraisal of RCTs did not alter the conclusion from this meta-analysis: individually prescribed homeopathic medicines may have small, but specific treatment effects beyond placebo. As Dr Mathie said at the end of his talk:

Our cautious positive conclusion reflects RCT evidence in individualised homeopathy across a spectrum of medical conditions that transcends condition-based interpretation. We need to take the emphasis of research evidence away from single medical conditions and direct it towards patients’ individuality.

Epilogus: ‘Homoeopathia! Quo vadis?’ (Conclusion: ‘Homeopathy! Where are you going?’)

So how did this second HRI Conference in Rome compare with the first in Barcelona? That has been a difficult call to make. The first was noted by its sheer exuberance at the volume and variety of homeopathic research, plus the fact that this kind of conference was something new: the second seems to have been a much more measured affair – a taking stock if you like – a consolidation on some of the advances announced in 2013.

This is perhaps entirely understandable as, for reasons of lack of funding and negative media exposure, two years might be too short a period to fully capitalise on new ideas. In addition, planning and

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Positive results from RCTs of individualised homeopathic treatment are potentially crucial in defending and promoting homeopathy.

![Figure 5: Risk of bias design- nation per RCT; N=22 RCTs with data extractable for meta-analysis](image)

© Dr Robert Mathie
Running trials, especially in such a controversial field as homeopathy, takes much time and effort. So perhaps it was too much to expect, two years on, Rome to be perhaps as ‘boisterous’ as Barcelona. That said, there were for me some standout moments. To recap:

- Work on the use of solvatochromic dyes as molecular probes of ultra-diluted solutions has certainly come on apace and has the potential to provide a simple approach to the measurement of potencies in the future.
- When strictures almost as tough as a Greek EU bailout are applied to RCTs of individualised homeopathy, it still comes back with a small, yet measurably positive effect above and beyond placebo. Also, in the main, homeopathy experiments have a reasonably good record on reproducibility.
- At the molecular level, it appears homeopathic remedies interact with allosteric protein receptor sites (so modulating cellular signalling processes), and also affect the over-expression of genes in stressed/ poisoned organisms.

These three sets of observations should give so-called ‘sceptics’ something to chew on – hopefully they’ll choke on them! More importantly, they strengthen the argument (and urgency) that homeopathy should be better integrated into conventional healthcare, especially at a time when there is a growing crisis of multimorbidity, polypharmacy, adverse drug reactions, antimicrobial resistance, and mounting cost. My guess is that it will be the developing world that will lead on this.

On the downside though, it was disappointing we did not hear more in Rome about the possible ‘field effect’ that so energised Barcelona, or for that matter Dr Iris Bell’s nanoparticles. Both of these areas have intriguing future possibilities for explaining how homeopathy might ‘work’.

**Confidence in our own experimental findings will be of more vital importance than finding a homeopathic equivalent of the Higgs boson**

I know: like our earlier hungry Roman seagulls, the sceptics are circling to attack yet again. Therefore confidence in our own experimental findings, it could be argued, at this time will be of more vital importance to our defence than finding anything as fabulous as a homeopathic equivalent of the

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10 - 16 April

UK Homeopathy Awareness Week (HAW) is moving so we can celebrate Samuel Hahnemann’s birthday alongside World Homeopathy Awareness Week.

4Homeopathy is planning a special HAW campaign for 2016 based on the outcomes from our March 2015 one-day event.

Watch this space!

www.findahomeopath.org.uk
Higgs boson. Still, curmudgeon that I am, it would have been nice to have heard more about that ‘field effect’. Hopefully, we’ll hear more of these developments soon, if not at the next HRI Conference.

So, homeopathy, where ARE you going? If Barcelona announced the first step in a journey of 10,000 miles, Rome could be seen more like a rest to take stock, consolidate, and see how far we have come ... and how far there is still to go. But nigglingly, there’s something else.

Readers might have noted that almost everyone referred to in this piece is either Dr this or Professor that and so on. Where were the ‘normal’ homeopaths, you might ask, and how were they represented in Rome? Of course, it depends on what you mean by ‘normal’, but let’s assume I’m talking about non-medical, that is, professional homeopaths. Well, there weren’t all that many around, which isn’t that surprising as conferences are costly and unless you are an invited keynote speaker, richer than Crassus (see box on this page), or have an academic position with grants that cover your expenses, the chances are you won’t be able to afford it (fortunately, I was the grateful recipient of a Manchester Homeopathic Clinic bursary which provided the necessary funds: thank you MHC!).

We must also remember that UK-style professional homeopathy is a rare beast, especially in most of Europe (where it is necessary to be medically qualified to practise homeopathy), so that the majority of attendees were likely to be medical homeopaths. However, the veterinary side of homeopathy was lacking this time, and any potential conflict over the use of animals in homeopathic research, or indeed the usual internecine squabbling over, for example, single remedy versus polypharmacy prescribing, was rapidly squashed. We were all friends in Rome, and the demise of its classical Republic then Empire was not going to be mirrored by homeopathic civil trouble and strife! Even so, Rome did have the feel of a homeopathy researchers’ ‘club’ in the making.

What we’re really talking about here is the perennial divide between the two streams of homeopathy – professional and medical – and (hateful though it might be to bring up yet again, especially when we are all trying to be so ecumenical), one – admittedly jaundiced – way of looking at this conference was that what it really represented is homeopathy’s increasing ‘scientification’.

Are professional homeopaths trying to help their patients while scratching a living really all that bothered whether potencies can be measured using UV / visible spectrophotometry; that rigorous analysis of the RCT data shows homeopathy has a small but significant effect beyond placebo, or that remedies might be working at the cell signalling and genetic levels? They...
Who ultimately are we trying to convince?
And are we getting too concerned about what ‘others’ think about us?

Agnoscore (Acknowledgement)
I am deeply indebted to the Manchester Homeopathic Clinic for a bursary to attend the second HRI Conference in Rome and present two posters on my research. I am also grateful to Drs Steve Cartwright and Robert Mathie for permission to use their material in this article.

‘Redde Caesaris quae sunt Caesaris’ (‘Render unto Caesar that which is Caesar’s’)

References


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[Accessed 15th July 2015]


Milgrom LR (2014) ‘“Living is easy with eyes closed ...” On blinded RCTs and specific and non-specific effects of complex therapeutic interventions’, Eur J Integr Med; 6: 552-559.


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[Accessed 15th July 2015]