

Response to NH&MRC draft report on homeopathy

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Introduction

The NH&MRC report concluded “There is no reliable evidence that homeopathy is effective for treating health conditions”. It began by making the following **exclusions of evidence** from its analysis:

- Evidence of “whether homeopathy is good for general health.”
- “Evidence for whether or not homeopathy is effective for preventing health conditions”.
- Any evidence examining the economic cost-benefits of homeopathy.
- Evidence supporting homeopathy that was not derived from “prospective, controlled studies”, such as “observational studies, individual experiences and testimonials, case series and reports, or research that was not done using standard methods.”

Then considering evidence from prospective, controlled studies, the NH&MRC claimed that there were “no health conditions for which there was reliable evidence that homeopathy was effective. No good-quality, well-designed studies with enough participants for a meaningful result reported either that homeopathy caused greater health improvements than placebo, or caused health improvements equal to those of another treatment”. They made this claim despite the fact that in the studies listed by Optum (REF) (appointed by the NH&MRC) there were many studies reporting “significant effects in favour of homeopathy” with Jadad scores as high as 5.

So after eliminating by definition a significant body of “real world” evidence supporting homeopathy, by defining away positive health promotion and disease prevention consequences of homeopathy and focussing on disease treatment, by ignoring potential economic cost-benefits of homeopathy, by accepting only limited types of evidence and within that body of evidence categorising all evidence supporting homeopathy as poor quality despite the existence of positive studies of high quality, the NH&MRC has concluded that there is no evidence supporting homeopathy! Many will take an interest when Senate Estimates eventually reveal the cost to taxpayers of reaching such an inevitable conclusion.

The following arguments contend that the NH&MRC conclusions derived from tightly defined reviews of reviews may be theoretically defensible, but are practically unhelpful in the real world.

Four Practical Tests of the Findings

It is proposed that the NH&MRC report fails 4 tests:

1. The common sense test
2. The reasonable question test.
3. The appropriate methodology test
4. The freedom from bias test

1. The Common Sense Test

The first NH&MRC conclusion on which the remainder rest, that “There is no reliable evidence that homeopathy is effective for treating health conditions” fails the common sense test.

The World Health Organisation (WHO) published an Atlas of Traditional, Complementary and Alternative Medicine (TCAM) which showed that homeopathic medicine was the most used form of TCAM in countries with a GDP > \$15,000, and the second most used form of TCAM in the remainder¹. Thus it can be estimated that homeopathy is currently being used successfully by over 500 million people throughout the

world, and in many countries as primary care medicine, and practised by health professionals with MB BS qualifications or equivalent as well as practitioners with University level qualifications in health sciences.

Thus the “elephant in the room” in the NH&MRC analysis is the fact that over the last 200 years homeopathy has been used successfully by billions of people, and has been administered by hundreds of thousands if not millions of practitioners with MB BS (or equivalent) qualifications as well as others with specialised homeopathic training, and is part of government public health systems in countries around the world. Yet by inference all these patients, practitioners and governments are wrong, and the NH&MRC is right – an incongruity for which no explanation was offered! It simply doesn’t make common sense.

2. The Reasonable Question Test

Australia is faced with an epidemic of chronic disease (according to ABS figures [ref](#)). Australia is also faced with a potentially unsustainable health budget blowout in the coming decades (the two are linked). Yet the NH&MRC chose to eliminate any consideration of health and wellbeing from their analysis, and chose not to consider any economic benefits from using homeopathy.

An appropriate question would be – can properly prescribed homeopathic medicine make a positive contribution to the total health and wellbeing of Australians and contribute to reducing the cost burden of chronic disease on the Australian health budget?” Instead the authors asked the question “*Is homeopathy an effective treatment for health conditions, compared with no homeopathy, or compared to other treatments?*” NHMRC did not consider evidence for whether or not homeopathy is effective for preventing health conditions (including evidence about homeopathic ‘vaccines’), or whether homeopathy is good for general health”.

In other words the authors rejected an analysis of the potential health benefits of homeopathy and avoided any comparative economic cost-benefit analysis of homeopathy and pharmaceutical medicine in favour of a tightly defined focus on disease management. This approach reflects the essential philosophical difference between complementary and alternative medicine (CAM) and pharmaceutical medicine (holistic V’s reductionist).

In the present budgetary environment it is suggested that it is not responsible to ignore the potentially significant net benefits of homeopathy in practical health care situations. Some examples of relevant cost-benefit studies are referenced^{2, 3, 4, 5, 6, 7, 8, 9}.

3. The Appropriate Methodology Test

The researchers narrowed their definition of acceptable evidence to “only evidence from systematic reviews that included prospectively designed and controlled studies conducted in humans (including randomised controlled trials, pseudo-randomised controlled trials, non-randomised controlled trials and prospective cohort studies)”.

This recognises that randomised controlled trials (RCT’s) are at the pinnacle of the evidence hierarchy in pharmaceutical medicine. However the orthodox literature carries many contributions showing the inherent flaws in this evidence. Examples range from Ioannidis in 2005¹⁰, to Kaplan in 2011¹¹ and the Harvard University findings in 2013¹².

Walach described what he called *the efficacy paradox*. This demonstrates that RCT’s will endorse a treatment with a relatively strong specific effect but with a weak or negative impact on the total health and wellbeing of subjects, compared to another treatment with a relatively weaker specific effect but a significantly positive impact to the total health and wellbeing of subjects¹³. He and others propose using a range of statistical methods to thoroughly evaluate the holistic benefits of therapies¹⁴, especially CAM therapies such as homeopathy which produce large non-specific effects.

It is thus contended that the NH&MRC's refusal to accept any evidence outside of their narrow definition above, immediately eliminated relevant evidence that was at least as appropriate as RCT's to measure the health effects of homeopathy.

4. The Freedom From Bias Test

A number of factors raise a concern about the potential for bias in the NH&MRC report.

(i) The report claimed that "The Homeopathy Working Committee was made up of experts in evidence-based medicine, clinical trials, and complementary medicines research". However there were no experts in homeopathy on the panel, and the only person on the panel not directly involved in pharmaceutical medicine was not trained or experienced in homeopathy.

(ii) The 4th NH&MRC conclusion directs that "People who are considering whether to use homeopathy should first get advice from a health professional (e.g. GP, specialist, nurse practitioner or pharmacist)". This shows that the NH&MRC does not regard fully qualified homeopaths as health professionals despite University level accredited training which is among the best in the world, including rigorous studies in the orthodox health sciences as well as an extensive homeopathic curriculum. It also ignores the fact that in Australia there are homeopaths with MB BS qualifications and that internationally this is very common – are these people not regarded as health professionals because they use homeopathy? Further, it is recommending that the public seek advice on a subject from the people they list who know nothing about the subject - homeopathy.

(iii) The NH&MRC considered two Government related investigations: "A report by the UK House of Commons Science and Technology Committee stated that 'the systematic reviews and meta-analyses conclusively demonstrate that homeopathic products perform no better than placebos'. This report concluded that any health benefits that people experience when they use homeopathy is solely due to the placebo effect. In contrast, a Swiss Health Technology Assessment report on Homeopathy commissioned by the Swiss government concluded that homeopathy is a 'valuable addition to the conventional medical landscape'.(7) The difference between the findings of the UK and Swiss reports was mainly due to their different methods for assessing research evidence". "Both the UK and Swiss reports have been criticised by those who disagree with their methods and findings".

The UK report relied very heavily on the research published by Shang et al. The Commons Committee wrote - "(paragraph) 69. The review which we consider the most comprehensive to date is that by Shang *et al*. The review compared 110 placebo-controlled trials of homeopathy matched according to disorder and type of outcome to trials of conventional medicine. The study only included trials that were controlled, included randomised assignment to treatment or placebo groups and were accompanied by sufficient data for odds ratio calculations.... 89. The authors concluded that "when analyses were restricted to large trials of higher quality there was no convincing evidence that homeopathy was superior to placebo"¹⁵.

However, even though Shang first claimed that their conclusions were based on 110 homeopathy trials compared to 110 trials of conventional medicine, it was subsequently shown that they had based their conclusions on just eight homeopathy trials compared with six conventional trials only. When re-analysing the data of this study, researchers found that homeopathy had a significant effect beyond placebo, and the conclusions drawn by the original authors were highly influenced by one single trial [ref](#). Moreover, Shang acknowledged that the overall quality of homeopathy trials was significantly higher than in the conventional trials.

"The Swiss report was criticised by a review that argued it was 'scientifically, logically and ethically flawed', 'misinterprets studies previously exposed as weak' and 'attempts to discredit randomised controlled trials as the gold standard of evidence'". These comments were made by a professed opponent of homeopathy¹⁶, hardly an objective scientific rebuttal.

“In assessing the evidence, NH&MRC considered these reports and their methodologies”. The fact that they chose to reject a broadly based method of analysis drawing on practical results, in favour of a tightly defined and inherently flawed approach is suggestive of bias.

(iv) The NH&MRC report claims that there are no high quality trials of homeopathy. Yet the report by Shang on which the UK House of Commons Report (quoted by the NH&MRC as support for their position) was largely based, found 21 higher quality homeopathic trials¹⁷. The Shang report also referred to “a study of 23 trials of homeopathy that were considered to be of high methodological quality”. In the report by Optum commissioned by the NH&MRC there were many studies reporting “significant effects in favour of homeopathy” with Jadad scores as high as 5. The fact that the NH&MRC report claimed (incorrectly) that there were no high quality trials is suggestive of bias.

(v) The most thorough study yet of the impact of institutional corruption on orthodox medicine clearly shows the bias present in orthodox medical training, bias in the so called high quality RCT trials of pharmaceutical products which the NH&MRC claims are superior to homeopathy, and bias in the way in which health officials and politicians are given medical information. These factors all have the potential to bias the NH&MRC report against homeopathy.

For example, Lab Fellows from the Edmond J. Safra Center for Ethics at Harvard University undertook exhaustive research over five years, the findings of which were presented in a series of sixteen articles in the *Journal of Law, Medicine and Ethics*, Vol. 41, No. 3 (2013). They reported that (i) “widespread practices in the medical and pharmaceutical industries can lead to doctors who are psychologically, financially, or intellectually dependent on drug companies, a phenomenon which has resulted in insufficiently tested drugs, many of which cause harmful side effects”, (ii) “top medical researchers can be financially tied to drug firms”, (iii) “pharmaceutical marketing ... distorts medical practice”, (iv) “drug firms are ... funding social network websites for doctors in order to quietly track their opinions on issues that affect their bottom lines”, and (v) “lawmakers and patient advocacy organizations can be dependent on money from drug companies, resulting in representation that serves the interests of Big Pharma rather than the public”¹⁸.

Professor John Ioannidis and colleagues also demonstrated that the pharmaceutical “industry has created means to intervene in all steps of the processes that influence healthcare research, strategy, expenditure and practice. These include: (i) evidence base production, (ii) evidence synthesis, (iii) understanding of harms issues, (iv) cost-effectiveness evaluation, (v) clinical guidelines formation, (vi) healthcare professional education and (vii) direct influences on healthcare professional decisions”¹⁹.

These findings suggest that the motivation, methodology and data used in the NH&MRC report are inherently biased against CAM in general and homeopathy in particular, especially when compared to pharmaceutical medicine..

(vi) The fact that the NH&MRC report failed the first 3 tests posed above suggests the presence of bias.

(vii) It is not suggested here that the bias in the NH&MRC report was in any way a malicious attempt by the panel to corrupt the findings – but that evidence above shows that the existing data-base of pharmaceutical medicine is already corrupted, as is the training and information sources of many people working in pharmaceutical medicine (including presumably panel members), and that the question asked and the data and issues ignored by the panel is reflective of this inherent bias in the pharmaceutical medicine evidence evaluation system. To see the consequences of Big Pharma influence is simple – in countries where the pharmaceutical industry has less control, then CAM (including homeopathy) is successfully used in the mainstream health system, and in countries such as Australia the opposite occurs.

Some thoughts on the Implications of the NH&MRC Report

It is worth considering the effect of the report in the community. Making the assumption that the findings of the final report will not differ greatly from those of the draft now being considered, it may be suggested that:

In Australia, the NH&MRC report will be greeted enthusiastically by anti-CAM groups such as skeptics and The Friends of Science; it will be welcomed in the boardrooms of Big Pharma; it will no doubt be used to influence politicians into pressuring health funds to further withdraw support from homeopathy; but it will be seen by those hundreds of thousands of satisfied users of homeopathy as yet another example of the influence of Big Pharma on official medicine in this country, and will further reduce the trust that such people have in their country's peak medical body. It may also threaten the rights of at least some of the 60% of Australians who currently support and use CAM in general (and homeopathy in particular) to maintain access to their preferred method of health care (and incidentally a method which reduces the cost burden on the public health system through effective health promotion and prevention of disease).

Internationally the report will receive support from equivalent groups as above; it will be similarly dismissed by informed users of CAM. I cannot suggest how it will be perceived by health officials in countries that have successfully incorporated homeopathy into their mainstream health systems, given that the NH&MRC are in effect suggesting that they are fools.

Overall, the report will be divisive. It will convince the already convinced, and further alienate the already partially alienated – because it does not begin with the needed question, it does not use appropriate methodology, it is subject to bias, and it fails the common sense test, and thus ignores the practical needs of health consumers and governments.

Conclusions

Australia has a disease management system which is advanced in many ways, especially in emergency medicine and surgery, but has not been able to control chronic disease levels. It is following the American path of becoming unaffordable. Australia needs a new medical paradigm focusing on health and wellbeing, involving the integration of proven CAM modalities into the current system for the immediate benefit of patients and an immediate reduction in costs in the short-term, and in chronic disease rates (and hence costs) in the long-term. The NH&MRC should lead the new paradigm and not simply protect the old one, which will be the main outcome of this report unless the panel redefines the question being asked and takes an holistic view of evidence and includes all relevant material in an appropriately restructured analysis.

Declaration of Interests: Isaac Golden PhD has been a homeopathic practitioner since 1984. He has been actively involved in homeopathic research for most of that time, and has worked with the Finlay Institute in Cuba, collecting and publishing data on their national homeopathic immunisation programs involving millions of people. He has booked a 4th visit to Finlay Institute in August this year to examine data on their current Dengue Fever immunisation program, as well as other programs.

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¹ Ong CK et al. *WHO Global Atlas of Traditional, Complementary and Alternative Medicine*. World Health organization. Kobe. (2005). Page 63.

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