Part 3

To assess whether the Swiss HTA report and the conclusions it draws are sound.

Homeopathy in Healthcare - Effectiveness, Appropriateness, Safety, Costs An HTA report on homeopathy as part of the Swiss Complementary Medicine Evaluation Programme,

Gudrun Bornhöft and Peter F Mattheissen (eds), SpringerMedizin, Berlin, Heidelberg, 2011 (English translation by Margot M Saar)

This book was published as a report of part of the Complementary Medicine Evaluation Programme (*Programm Evaluation Komplementärmedizin* – PEK) set up by the government of Switzerland following its decision in 1998 to provisionally include the complementary medical disciplines of anthroposophical medicine, homeopathy, traditional Chinese medicine, phytotherapy and neural therapy in the list of services covered under the national statutory health insurance scheme. Acknowledgement for help in the revision and publication of the book is made particularly to the PanMedion Foundation Zurich.

The primary motivation for the PEK was to try to arrive at a decision concerning the funding of complementary and alternative medical approaches that reconciled the high demand for, widespread use of and public acceptance of complementary and alternative medicines (and the political aspiration for benefit both in cost and in preventative medicine) with the concerns of mainstream medicine that alternative approaches were ineffective, even harmful.

The book contains a series of some ten chapters dealing with a definition of homeopathy, problems in homeopathic research, general problems in clinical trials in research, the materials and methods used in the HTA, the international use of complementary medical approaches, the particular conditions of use of complementary and alternative medicine in Switzerland, an overview of systematic reviews on the clinical efficacy of homeopathy, clinical studies on the effectiveness of homeopathy for upper respiratory tract infections and allergic reactions, safety of homeopathic use, and the cost effectiveness of homeopathy, by a number of authors.

The work was carried out over some seven years, involving literature analyses and special trials and surveys to assess the individual aspects of the study which were published individually before being consolidated into monograph form. The main conclusion concerning efficacy was drawn from a meta analysis of qualifying trials which demonstrated efficacy for the interventions of conventional medicine and phytotherapy, but no significant difference from placebo for homeopathy. Publication of this latter finding led to an editorial in the *Lancet* entitled "The end of homeopathy". The 2011 book included a reworking of the analysis of the data in the Shang *et al.* article largely by considering only

¹ A Shang, K Huwiler-Muntener, L Nartey, P Jüni, S Dörig, J A C Sterne, D Pewsner and M Egger (2005) Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy *Lancet* **366**: 726-732

² Editorial (2005) The end of homeopathy, *Lancet* **366**:690; doi: 10.1016/S0140-6736(05)67149-8

the therapeutic studies (by removing data for prevention studies). Considering the therapeutic studies only the number of significant trials *versus* non-significant becomes 28 *vs* 23, instead of 32 *vs* 33 in the original publication. This is described as

...a truly remarkable result in favour of homeopathy³...

by the editors of the book in their introduction but the same authors in their own contribution describing their own reworking of the data state more cautiously

"While the above argument does not allow to draw the reverse conclusion that homeopathy is effective, it does support the claim that the Shang et al. (2005a) study does not prove the ineffectiveness of homeopathy". 4 (my underlining).

This introduction quotation was hailed as a significant development in establishing the validity of homeopathy but the present author can only agree with the more restrained comment.

It is worth noting in summary that the Health Technology Assessment (HTA) examines not only efficacy of particular medical interventions but also real-world effectiveness, its appropriateness, safety and economy. Importantly, this approach is wider than analyses carried by the Cochrane Collaboration Standards which largely consist of meta analyses and systemic reviews, *i.e.* are concerned only with the evaluation of efficacy. In the present author's view, this encapsulates the crux of the argument between those in favour of homeopathy and those against: different things are being compared. The evidence of the efficacy of homeopathy established by the conventional criterion of robust randomised clinical trials is lacking and so this is used by the detractors as evidence against. Conversely, studies which include effectiveness may show benefit, and so naturally those in favour of homeopathy tend to cite and give prominence to these studies. The problem with this is of course that identical positive effectiveness outcomes could be caused by a response due to the placebo effect alone.

It is worth mentioning that the overall conclusion of the PEK including

much more comprehensive and differentiated HTAs ascertained that the individual CAM interventions, especially homeopathy, were effective, under Swiss conditions safe and, as far as could be judged from the trial situation, also cost-efficient.⁵

³ Gudrun Bornhöft and Peter F Mattheissen (eds) (2011) Homeopathy in Healthcare - Effectiveness, Appropriateness, Safety, Costs. An HTA report on homeopathy as part of the Swiss Complementary Medicine Evaluation Programme, SpringerMedizin, Berlin, Heidelberg, (English translation by Margot M Saar), p3

⁴ Gudrun Bornhöft and Peter F Mattheissen (2011) General problems with clinical trials in research in Gudrun Bornhöft and Peter F Mattheissen (eds) Homeopathy in Healthcare - Effectiveness, Appropriateness, Safety, Costs. An HTA report on homeopathy as part of the Swiss Complementary Medicine Evaluation Programme, SpringerMedizin, Berlin, Heidelberg, (English translation by Margot M Saar), p44

⁵ Gudrun Bornhöft and Peter F Mattheissen (eds) (2011) Homeopathy in Healthcare - Effectiveness, Appropriateness, Safety, Costs. An HTA report on homeopathy as part of the Swiss Complementary

The report was undertaken to address the context in Switzerland where the practice of homeopathy is more established than it is here.

This reviewer emphasises the clear distinction between the establishment of efficacy (by the established gold standard criterion of randomized controlled trials of a *single defined* product) and considerations of effectiveness, studies of which are wide ranging and include a range of social criteria and economic considerations as well 'simple' efficacy.