

EDITORIAL

The wide scientific and geographical spread of homeopathy



This issue of Homeopathy reflects the wide scientific and geographical spread of scientific work in homeopathy. From Phillip Cottingham and colleague's survey of New Zealand homeopaths, a country on whose homeopathic tradition little has been published¹; to Emma Macías-Cortés and colleagues' further analysis of the results their HOMDEP-MENOP randomised controlled trial, conducted in Mexico City.

The HOMDEP-MENOP study, whose main results were published in 2015, compared individualised homeopathic treatment with Fluoxetine and placebo in a randomised, double dummy clinical trial on 133 post-menopausal and perimenopausal women.² Individualised homeopathy was as effective as fluoxetine and more effective than placebo, in a deprived cohort of women with high prevalence of domestic violence and overweight/obesity. Homeopathy also benefited menopausal symptoms, while fluoxetine did not. In the follow-up paper published in this issue the authors examine the association between baseline metabolic parameters including overweight/obesity, hypercholesterolaemia and hypothyroidism.³ They found no correlation between lack of response to homeopathic treatment and dyslipidaemia, overweight or insulin resistance.

Novel biological models

In this issue we publish two novel biological models: the work of Tânia Pasetti and colleagues from Brazil, suggests that homeopathic *Belladonna* and methicillin-resistant *Staphylococcus aureus* (MRSA) nosode enhance the effects of antibiotics on MRSA in culture.⁴ This finding is of great interest in the context of grave worldwide concern about antimicrobial resistance. But independent repetition and much further work is required before any definitive conclusions can be drawn. Steve Olsen from the USA, describes another novel model examining the effect of sodium butyrate 30 and 200c on viability and gene expression of cultured human kidney cells.⁵ Sodium butyrate was selected because of its known effects in cultured mammalian cells, including inhibition of cell proliferation and apoptosis in cancer cells.

Also in this issue Steven Cartwright (UK) extends his chemical work on solvatochromic dyes, looking at interaction of the solvatochromic dye BDF with potentised Glycerol 50 M at varying pH values. Large and reproducible spectral changes were observed in the presence of potencies. The effect is strongly dependent on pH, for reasons which are not entirely clear. It may be that the homeopathic

preparation stabilises the dye in its excited state.⁶ Still with basic science the Italian team led by Lucietta Betti publish further work on wheat seeds treated with *Arsenicum album* 45c, investigating the effect of the number of succussion strokes.⁷ They used the droplet evaporation method and measured germination rate and local fractal connected dimensional in evaporated leakage droplets from stressed wheat seeds. They demonstrated a highly significant effect of the number of succussion strokes used in the preparation of *Arsenicum album*.

Unconventional experiments

At the fundamental theoretical level Francis Beauvais (France) further develops his work on the implications of macroscopic quantum entanglement for clinical trials and experiments in homeopathy, in the light of the work of Thieves *et al.*⁸ He remarks, no doubt correctly, that mathematical formulations of quantum logic are an obstacle for physicians and biologists. In response to this problem he proposes what he describes as a simple model of 'unconventional' experiments, including in-vitro or clinical studies on high dilutions, based on classical probability. This is more comprehensible than the highly abstract mathematical formulations of quantum logic. Although sometimes highly counterintuitive, the predictions generated by quantum theory have been validated at the microscopic although not, as in this case, at macroscopic scale. But Beauvais' description of his model as 'simple' may be overoptimistic, it remains dense and difficult to comprehend in common sense terms. But the practical implications are clear and testable. The theory predicts that if the objective of a clinical trial or experiment is to investigate the difference between control and homeopathic treatment experimental designs should use local blinding. But if the objective is to test whether quantum like effects are involved 'meta-experiments', including arms with local and central blinding are required. Such designs are demanding, but the prospect that they might lead to optimised experimental design justifies the effort.

References

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