

Repetitions of fundamental research models for homeopathically prepared dilutions beyond 10⁻²³: a bibliometric study

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ABSTRACT

Introduction: Repeatability of experiments is an important criterion of modern research and a major challenge for homeopathic basic research. There is a lack of a recent overview about basic research studies in high homeopathic potencies that have been subjected to laboratory-internal, multicenter or independent repetition trials. **Methods:** We considered biochemical, immunological, botanical, cell biological and zoological studies on high potencies, i.e. beyond a dilution of 10⁻²³. Main sources of information were reviews, personal contact with members of the homeopathic basic research community, and the MEDLINE and HOMBREX databases. Studies were extracted from the publications and grouped into models. Studies were further sorted according to repetition type (laboratory-internal, multicenter, or independent) and results achieved. **Results:** A total of 107 studies have been found. From these, 30 were initial studies. In the attempt to reproduce one of these initial studies, 53 follow up studies yielded comparable effects (35 laboratory-internal, 8 multicenter, 10 independent repetitions), eight studies showed a consistent, yet different result from the initial study (2 laboratory-internal, 2 multicenter, 4 independent repetitions), and 16 studies yielded zero effects (5 laboratory-internal, 2 multicenter, 9 independent repetitions). When all repetitive studies are considered, 69% reported effects comparable to that of the initial study, 10% different effects, and 21% zero effects. Independently performed repetition studies reported 44% comparable effects, 17% different effects, and 39% zero effects. **Conclusions:** We identified 24 experimental models in basic research on high homeopathic potencies, which were repeatedly investigated. 22 models were reproduced with comparable results, 6 models with different results, and repetition showed no results for 15 models. Independent reproductions with either comparable or different results were found for seven models. We encourage further repetition trials of published studies, in order to learn more about the model systems used and in order to test their repeatability [1].

[1] Endler PC, Thieves K, Reich C, Matthiessen P, Bonamin L, Scherr C, Baumgartner S. Repetitions of fundamental research models for homeopathically prepared dilutions beyond 10⁻²³: a bibliometric study. *Homeopathy*. 2010; 99: 25-36.

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