are prescribed millions of times. For these medicines, every possible symptom will be seen in a cured case eventually by mere chance. This doesn't mean that each symptom is an indication for that medicine. Following Bayes' theorem a symptom is an indication for a medicine, only if the prevalence of the symptom in the population responding well to that medicine is higher than in the remainder of the population. This is expressed as likelihood ratio (LR). Higher LR means a better symptom. This requires quantitative analysis of clinical data in prognosis research.

There are good reasons to optimise homeopathic prescribing for cough; the most frequent indication in general practice with scarce conventional therapeutic options and a frequent reason for prescribing antibiotics. There is some evidence of efficacy of homeopathy for this indication.

Quantitative analysis of some data collections learns that performing quantitative research in homeopathy on existing databases is a challenge. Comparability can be improved. There is confirmation bias, especially in cases with short follow-up. Another problem is how to identify each successful case where the medicine caused the improvement and to skip cases with no real effect. This has great impact on quantitative analysis.

Analysing existing databases on cough shows that coherence and effectiveness can be improved. Quantitative data show that the quality of our knowledge about 'cough medicines' is insufficient, but quantitative analysis is still inconsistent, probably biased and distinction between real cases and spontaneous recovery problematic. With a mixed methods approach we strive for mutual enhancement of both qualitative and quantitative research in homeopathy.

*Keywords*: Cough, Mixed methods research, Prognosis research, Bayes' theorem

## Clinical trial for evaluation of a HIV nosode in the treatment of HIV infected participants

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*Introduction*: Identifying the need for strengthening of immune system, the investigator has developed new HIV nosode and evaluated its effect on HIV positive individuals through a clinical trial.

*Method*: Standardized and scientific method of HIV nosode preparation has been described and documented. A clinical trial in thirty HIV positive individuals was conducted using the HIV nosode in 30c, 50c potencies. Ethical aspects, safety and inclusion exclusion criteria were taken care of.

Results: Out of twenty-seven participants, 25.93% showed sustained reduction in viral load. 33.33% showed an increase in the CD4+ counts by 20% at either week twelve or twenty-four. Significant weight gain was observed at week twelve (p = 0.0206). A significant proportion of participants, 63% and 55% showed overall increase in either appetite or weight at week twelve and twenty-four respectively. The viral load increased from baseline to week twenty-four through week twelve in which the increase was not statistically significant (p > 0.05). 37% participants have shown improvement (1.54-48.35%) in CD4+ count and 15% had a stable CD4+ percentage count until week twenty-four. Sixteen out of twenty-seven participants had a decrease (1.8-46.43%) in CD8 count. None of the AEs led to discontinuation of study.

**Conclusion**: The study results revealed improvement in immunological parameters, treatment satisfaction, reported by an increase in weight, relief in symptoms, and an improvement in quality of life, which opens up possibilities for future studies.

*Keywords*: HIV nosode, HIV infection, CD4, Viral load, Homeopathy

## A group of recent provings in which the new HPCUS Provings. Guidelines were applied: some comments on the methodology

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The presentation will give an overview of our experience of 5 provings (pathogenetic trials) which were conducted using the new HPCUS Guidelines (published April 2013).

All the provings were randomized double-blind, placebo-controlled and used an unbalanced parallel group design, to establish a homeopathic symptom picture of the substance being proved.

The methodological requirements included:

- IRB approval
- Specific requirements regarding Proving personnel qualifications and training. This included ethics training, especially for the Proving Director.
- Prover insurance
- A placebo group (of 20%)
- Evaluation criteria for assessing the Proving symptoms
- A process for assessing and recording any Adverse Events encountered during a proving.

We will present our experience of applying the guidelines, the end result of which was a group of high-quality scientifically-accountable provings with useful homoeopathic symptom pictures.

*Keywords*: Provings, Pathogenetic trials, HPCUS provings guidelines, Placebo-controlled

## Single-blind study assessing the individualized homeopathic treatment of cancer patients versus placebo

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*Introduction*: Aim of our study was to compare the effects, on clinical and quality of life (QoL), of the individualized homeopathic treatment (IHT) versus placebo in patients with advanced cancer, receiving conventional palliative care, since there is no literature in this comparison.

Materials and methods: Prior authorization, we enrolled 16 patients with advanced cancer admitted to our Emergency Medicine Unit for acute illnesses since April 2014. After resolution of acute conditions through conventional therapies, patients were divided into two groups, matched for age, sex and clinical conditions. Following informed consent, a group was started to IHT, the other to placebo. To assess patients' physical and mental conditions and their QoL, in addition to clinical-instrumental examination, we used the EORTC-QLQ-C30 questionnaire in basal conditions, after a month and after four months of treatment. Statistical analysis was performed using the Student's t-test.

**Results**: The IHT group had significant clinical improvements compared to the control. We achieved significant improvements in laboratory tests only in IHT group. All the patients had, in basal conditions, important clinical problems such as: anxiety, depression, anorexia, phobias, panic attacks, erectile dysfunction, frigidity, important physical disabilities, intolerable pains that did not respond to analgesics; all these conditions were markedly improved only in the IHT group. From the EORTC-QLQ-C30 questionnaires analysis, all patients had a bad perception of their QoL at baseline and encountered many difficulties in daily activities. In the control questionnaires after a month, QoL's perception improved significantly only after IHT. Even

more pronounced the gap between the two groups at four months. Reduced intake of psychotropic drugs in IHT group. No significant side effects were detectable.

**Conclusions**: The IHT improves the clinical condition and QoL of patients with advanced cancer. The improvement obtained is statistically significant compared to placebo

*Keywords*: Advanced Cancer, Homeopathic Medicine, EORTC-QLQ-C30, QoL

## Physicochemical investigations of homeopathic potencies: a systematic review of the literature

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**Background**: Physicochemical investigations of homeopathic potencies have a long tradition dating back to the end of the 19th century. In order to direct future research, it is necessary to have a solid overview over previously used methods and experimental results. For this systematic review, we focus on laboratory experiments that investigate physicochemical properties of homeopathic potencies.

*Methods*: Relevant publications were searched for in databases (SCOPUS, Embase, Web of Science, Hom-BRex, PubMed), article references, and personal collections of literature. Eligible documents were peerreviewed articles, theses, books, book sections, and conference proceedings without language restrictions. Biological systems (cells, plants, animals), biochemical systems (enzyme activity), and mathematical models were excluded.

All articles found were rated by two reviewers according to a previously developed and adapted Manuscript Information Score (MIS). Articles can score between 0 and 10 points, as 0 to 2 points are given each for description of: experimental procedure, materials, measuring instruments, potentisation method, controls.

Articles with an average MIS  $\geq$  5 are considered of sufficient quality to be retained for further review.

**Results**: The literature search provided 240 references. We were able to obtain 230 of these publications. After initial scanning of the papers only 155 were found to be investigating homeopathy. Of these, 109 publications had a MIS score  $\geq$  5. Among the physical and chemical methods used are: nuclear magnetic resonance ( $^{1}$ H,  $^{13}$ C);