Conference presentation

Basic Research on Homeopathy: Analysis of the *Top Ten* Best Investigated Substances

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1. Introduction

Almost fifteen years after introducing HomBRex database [1] the number of registered experiments increased from about 900 at that time to more than 2000 in 2016. This worldwide unique database provides the most comprehensive library on basic research in the field of homeopathy. The first overview on classification of systems and methods used in basic research came to the conclusion that a variety of research questions can be derived from the huge number of data collected in HomBRex [2]. After evaluation of proving and therapeutic experiments [3], infection models [4] and the use of high potencies in basic research on homeopathy [5], the current study deals with the question which homeopathic substances in what sort of experiments were mainly under investigation.

2. Methods

The HomBRex database is updated continuously by systematic searching of bibliographic databases. Each registered experiment is analyzed by scientists of the Carstens-foundation (lately BS, PK) to provide detailed information on the following items: organism, condition, substance, in vitro/in vivo, prophylactic/therapeutic, potency, and others. For the current study, the entire database was categorized according to the substances investigated. For selected substances, further subgroups were analyzed (e.g. organism, research field, and others).

3. Results

The following substances rank among the top ten of investigated substances in basic research: Arsenicum album (N=189), Sulfur (N=103), Thuja occidentalis (N=77), Belladonna (N=72), Natrium chloratum (N=70), Cuprum sulfuricum (N=70), Arnica montana (N=70), Mercurius corrosivus (N=60), Phosphorus (N=60) and Apis mellifica (N=60).

Arsenicum album, first on the list, was tested on animals in 78 experiments, in 52 on plants. 91 experiments were conducted in vitro and 98 in vivo. 175 authors report positive results, 14 state negative results.

Apis mellifica, the number ten,s tested on animals (N=16, mainly on guinea pigs and rats) in the field of toxicology or physiology. Sixteen experiments deal with human cells, mainly on reaction in blood cells granulocytes and lymphocytes e.g. with different potencies of the substance. Experiments with plants focus on virus infected plants and their treatment with Apis, only two



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experiments belong to the field of physical chemistry. Most of the authors report on positive results in their papers (N=57), only three state negative results.

4. Discussion/Conclusion

The most often used substances in published homeopathic basic research are well proven, well known and also frequently used homeopathic remedies in human therapy. Inorganic compounds predominate. Quantitative meta-analyses are still difficult due to the heterogeneity of experimental models used. The current analysis provides an overview on which substances are most relevant for future replication trials in defined experimental models.

References

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