Scholars LITERATURE

La Prensa Medica Argentina

Research Article

DOI: https://doi.org/10.47275/2953-4763-453
Volume 111 Issue 6

Properties of Homeopathic Remedies

Mihael Drofenik[1,2*]

[1]Jožef Stefan Institute, Materials Synthesis, Ljubljana, Slovenia
[2]University of Maribor, Faculty of Chemistry and Chemical Engineering, Maribor, Slovenia

Abstract

This study examines the principles of homeopathic remedy preparation, with a focus on the role of potentization. Potentization, involving sequential dilution and agitation, is hypothesized to be a critical step that differentiates the final remedy from the starting material. The central claim is that this process transforms the substance from a material agent into a molecular configuration with information-carrying capacity, purportedly enabling holistic biological effects. Additionally, the manuscript catalogues the wide spectrum of remedy potencies employed clinically, compares their negligible (empty) molecular content to conventional drug doses, and critically assesses the ongoing debate regarding their mechanism of action, particularly in relation to placebo responses.

Keywords: Homeopathic remedy, Drug doses

Correspondence to: Mihael Drofenik, Jožef Stefan Institute, Materials Synthesis, Ljubljana, Slovenia and University of Maribor, Faculty of Chemistry and Chemical Engineering, Maribor, Slovenia.

Citation: Drofenik M (2025) Properties of Homeopathic Remedies. Prensa Med Argent, Volume 111:6. 453. DOI: https://doi.org/10.47275/2953-4763-453

Received: September 05, 2025; **Accepted:** November 17, 2025; **Published:** November 21, 2025

Introduction

Potentization of homeopathic remedies

Before Samuel Hahnemann formally established homeopathy in the early 19th century [1], European medicine lacked a structured therapeutic system of comparable scope. Nonetheless, the central principle of homeopathy Similia similibus curentur ("like cures like")-was known since antiquity and often attributed to Hippocrates. This principle posits that a substance capable of producing specific symptoms in a healthy individual can, when appropriately prepared, relieve similar symptoms in a diseased state.

In modern terms, a homeopathic remedy [2, 3] can be understood as a complex mixture of molecules, within which a dominant subset-termed Simillimum molecules is hypothesized to exert therapeutic effects [4]. This conceptual framework, encapsulated by the aphorism "like cures like," formed the foundation of Hahnemann's system [5]. From a thermodynamic modeling perspective, a therapeutic effect presupposes the presence of an active substance-namely, a chemically identical compound (Simillimum) occurring both in the remedy and within the human organism [6, 7].

Early homeopathic remedies and aggravation

In the late 18th century, homeopathic remedies were administered in crude, undiluted forms, typically derived from natural sources. While they exhibited therapeutic potential, their administration was often accompanied by strong initial reactions, manifesting as a worsening of symptoms or the emergence of new ones. This transient but distressing phenomenon became known as homeopathic aggravation [8].

Within a thermodynamic framework, aggravation may be conceptualized as a perturbation of dynamic equilibrium, interpretable through Le Chatelier's principle. The body maintains a balance between health-promoting and disease-promoting molecular processes. When administered, simillimum molecules may initially amplify symptoms according to pharmacodynamic principles. Subsequently, by Le Chatelier's principle, the system shifts toward re-establishing equilibrium, resulting in symptomatic improvement [9].

Because early remedies often provoked excessive aggravations, Hahnemann sought a method to preserve efficacy while minimizing adverse responses. This pursuit led to the introduction of potentization-serial dilution in water or alcohol combined with vigorous succussion [10].

Concept of potentization

The aim of potentization is to reduce aggravation while paradoxically enhancing therapeutic potential. Conceptually, potentization involves two interrelated processes:

- Reduction in concentration of the original active substance, including simillimum containing aggregates (nanoparticles).
- Alteration of physicochemical state, in which simillimum molecules are liberated from aggregates and stabilized in solution [11].

The process theoretically has no defined upper limit. However, systematic investigations have not demonstrated a consistent correlation between degree of potentization, measurable concentration of simillimum, and therapeutic efficacy. In practice, most commercial preparations use dilutions such as D6/D12 (pharmaceutical) or C30 (classical homeopathy). Here, D denotes decimal dilution (1:10) and C denotes centesimal dilution (1:100).

Although often described as "extreme" dilutions, these preparations may still contain detectable simillimum molecules. This assumption is based on the mechanical effects of succussion, which may release molecules from nanoparticles and stabilize them in solution [12]. Under such circumstances, the activity of homeopathic remedies could still be explained by conventional thermodynamic processes, as the probability of absolute molecular absence is not necessarily zero.

Stages of potentization

Potentization can be viewed as a continuum encompassing three conceptual stages:

- Low potentization - Preparations still contain nanoparticles of the original substance, capable of provoking aggravation.
- Moderate potentization - The fraction of free, stabilized simillimum molecules increases, while nanoparticle content declines. This state is considered optimal for therapeutic activity.
- High potentization - Successive dilutions reduce the presence of stabilized molecules to undetectable levels. Any therapeutic effect observed at this stage is attributed to placebo effect.

Thus, the outcome of potentization reflects a dynamic balance between two molecular forms:

- Nanoparticle-associated simillimum from the original suspension.
- Free, stabilized simillimum molecules released during succussion.

Initially, the abundance of free molecules increases, potentially explaining the enhanced effects of moderately potentized remedies. Beyond a critical dilution threshold, however, molecular content declines, yielding "empty" solutions. Since dilution ratios alone cannot reliably predict molecular content, direct analytical verification is required.

At very high levels of potentiation, the concentration of simillimum molecules may decrease beyond measurable limits. When this occurs, the medicinal effect can no longer be explained by molecular presence and is instead attributed to psychological mechanisms-specifically, the placebo effect [13].

Emergence of latent properties in homeopathic preparations

Beyond their measurable physicochemical properties, homeopathic remedies are hypothesized to possess latent properties that influence the organism in ways not fully explained by conventional pharmacology. In this view, dilution and succession are not merely quantitative reductions of the active substance but processes that reveal or activate inherent therapeutic potentials.

Potentization is thus hypothesized to induce structural transformations, shifting the remedy from a predominantly material state toward a more dispersed and dynamic one. During this transition, stabilized molecular forms are presumed to become increasingly bioavailable. Therapeutic activity is therefore attributed to the disruption of aggregates during succussion, releasing stabilized entities capable of more efficient biological interactions.

Unlike conventional pharmacology, which associates drug efficacy with concentration and receptor affinity, homeopathic theory proposes a paradox: therapeutic activity may increase as concentration decreases, provided that the proportion of dispersed and stabilized molecular forms rises. This is interpreted as a transition from a compact material state to a more dynamic and energetically active form.

From this perspective, higher levels of dilution and succussion are not seen as diminishing efficacy but as processes progressively uncovering the latent therapeutic properties of the remedy. The emphasis thus shifts from quantitative concentration to qualitative transformation.

It must be emphasized, however, that this framework generally assumes that potentization does not proceed to the point of complete absence of active substance. In practical applications, trace amounts of the original material are expected to remain, allowing interpretations of homeopathic action to be reconciled with classical thermodynamic principles [14].

Conclusion

Homeopathic medicine originates from ancient times, when it successfully treated the illness of patients, which is described by the saying "like with like". All further development is associated with the elimination of homeopathic aggravation and its improvement, which is based on the principle of potentization. The process of potentization and the change of the material form of the remedy into a molecular form, which supposedly reveals the latent properties of the remedy, increases the effectiveness of the remedy as long as the remedy molecules simillimum exist in solution. At very high levels of potentization and empty solutions, the healing effect, if observed, is based on the placebo effect. Future research endeavors should focus on identifying methodologies for detecting the molecular presence of the starting substance within the drug product, with consideration given to techniques such as nanostructure imaging mass spectrometry.

Acknowledgements

The author would like to express the sincere gratitude to Lenka Tanžera for her professional support and suggestions in the presentation of the homeopathy principle.

Conflicts of Interest

None.

References

1. Hahnemann S (2005) Organon of Medicine. Jain Publishers.
2. Hamre HJ, Glockmann A, von Ammon K, Riley DS, Kiene H (2023) Efficacy of homoeopathic treatment: systematic review of meta-analyses of randomized placebo-controlled homoeopathy trials for any indication. Syst Rev 12: 1-24. https://doi.org/10.1186/s13643-023-02313-2
3. Murphy R (2000) Homeopathic Remedy Guide: 1,200 Homeopathic and Herbal Remedies. In Pagosa Springs, Colorado: Hahnemann Academy of North America.
4. S Grabia, E Ernst (2003) Homeopathic aggravations: a systematic review of randomised, placebo-controlled clinical trials. Homeopathy 92: 92-98. https://doi.org/10.1016/s1475-4916(03)00007-9
5. Fisher P (2012) What is homeopathy? An introduction. Front Biosci 4: 1669-1682. https://doi.org/10.2741/489
6. Vithoulkas G (2014) The Science of Homeopathy. In Alonissos: International Academy of Classical Homeopathy. Grove Press, New York.
7. Bellavite P, Signorini A (2002) The Emerging Science of Homeopathy: Complexity, Biodynamics, and Nanopharmacology. North Atlantic Books, Berkeley.
8. Vithoulkas G (2017) Serious mistakes in meta-analysis of homeopathic research. J Med Life 10: 47-49.
9. Drofenik M (2020) Thermodynamic Aspects of Homeopathy. In Alternative Medicine Update. IntechOpen, pp 131–145.

10. Singh P, Salauddin M, Kuntal RS, Ahmad J, Sharma G (2020) Origin and evolution of potentization. Int J Homoeopathic Sci 4: 33–36. https://doi.org/10.33545/26164485.2020.v4.i3a.189

11. Drofenik M (2025) The principle of homeopathy. Prensa Med Argent 111: 1-3. https://doi.org/10.47275/2953-4763-449

12. Drofenik M, Tenžera L (2024) Homeopathy and medicine. Prensa Med Argent 110: 1-3. https://doi.org/10.47275/0032-745X-417

13. Shang A, Huwiler-Müntener K, Nartey L, Jüni P, Dörig S, et al. (2005) Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy. Lancet 366: 726–732. https://doi.org/10.1016/S0140-6736(05)67177-2

14. Kurczy ME, Northen TR, Trauger SA, Siuzdak G (2015) Nanostructure imaging mass spectrometry: the role of fluorocarbons in metabolite analysis and yoctomole level sensitivity. Methods Mol Biol 1203:141-149. https://doi.org/10.1007/978-1-4939-1357-2_14