



Homoeopathy: The Evidence Based Medicine

Dr. Sakshi Bhadana¹, Dr. Isha Thakur¹, Dr. Aditi Bhinda¹, Dr. Saumya Sharma¹, Dr. Komal Yadav¹

1- Post Graduate Scholar, Department of Materia Medica, Dr. M. P. K. Homoeopathic Medical College, Hospital & Research Centre, Jaipur, Rajasthan (A constituent college of Homoeopathy University, Jaipur)

Abstract

Homoeopathy is a system of medicine in which medicines are prescribed according to the law of “similia similibus curentur”. Medicines are dynamised to very high powers by a process of potentisation, where the materialistic concept of substance does not follow this rule. Homoeopathy have already claimed the existence of substance properties in dilutions even after the Avogadro’s number. Now after more than 250 years of service, Homoeopathy is being scientifically proved by various experimenters with new innovations.

Keywords: Homoeopathy, evidence-based medicine, nanoparticles.

Introduction

The Homoeopathic system of medicine was discovered by Dr. Samuel Hahnemann about 200 years ago in Germany. He was an old school physician who rejected its harmful modes of treatment like leeching and cupping citing them as less helpful and more torturous.¹ The term Homoeopathy was first coined by Dr. Samuel Hahnemann.

Homoeopathy is based on seven principles:

- “Law of similia”-homoeopathy is based on the law of “Similia Similibus Curentur” which means like cures like.² The law of similia is not new and was already described by Hippocrates and Dr. Hahnemann used it as a principle in homoeopathy.
- ‘Law of simplex’- Hahnemann advised that only a single simple medicinal substance should be administered to the patient at any given time.
- “Law of minimum”- minimum dose should be given to the patient to avoid aggravation, it also does not allow any organ damage.
- “Doctrine of drug proving”- according to this doctrine, all the drugs should be proven for all age groups and both genders to know the complete drug picture.
- “Theory of chronic disease”- Dr. Hahnemann gained success in treating acute cases but chronic cases would return after some time. It is then, he discovered that chronic miasms namely- psora, sycosis and syphilis.
- “Theory of vital force”- vital force maintains a balance between the tripod of life- mind, body and spirit and animates the material body and maintains harmony.
- ‘Doctrine of drug dynamisation’ is a process of preparation of drug, using processes such as trituration and succussion. These methods of drug preparation arouse latent inherent medicinal properties that can be used for the benefit of mankind.²

Homoeopathy treatment is holistic and different medicines are given to different people who suffer from the same condition.³

How was Homoeopathy discovered?

Hahnemann conceived the idea of Homoeopathy while translating a book written by the Scottish physician and chemist William Cullen into German. During translation he came across Cullen’s theory that Cinchona could cure malaria cases due to its bitter taste. Hahnemann was dissatisfied with this theory and ingested some bark to investigate whether it was true or not. He then experienced symptoms similar to malaria itself. From this

observation, he concluded that drugs when consumed by a healthy person produce the same symptoms that it is capable of curing. This led to the discovery of “like cures like” and the term “Homoeopathy” was coined which is derived from the Greek: ὅμοιος *hómoios*, "like" and πάθος *páthos*, "suffering".

Hahnemann then started proving various drugs on himself, his patients and his colleagues, which was called the Homoeopathic drug proving. All the symptoms produced during drug proving were recorded in the prover's language as well as the ancillary conditions under which they appeared.

Hahnemann believed that large doses of drug-producing similar symptoms would only aggravate the disease, therefore he advocated that drugs should be administered in small doses. A method was devised to prepare dilutions that would preserve the medicinal properties while removing the harmful effects of the drug substance. This process would not only eliminate the toxic properties but also enhance the curative power of the drugs.⁴

The Science of Homoeopathy

Every scientific method has 4 steps:

1. Observation and description of a phenomenon
2. Hypothesis formation to explain the phenomenon
3. Using the hypothesis to the existence of a new hypothesis or give quantitative results of the new observation
4. Test performed by several independent experimenters

Hahnemann carefully observed and saw that Cullen's theory was inaccurate and consumed the Cinchona bark himself to know its effect and discovered that any drug that can produce a disease can cure it. He confirmed his hypothesis through a series of experiments and proved many drugs. Stalwarts like Dr. C. Hering being an allopathic physician in his earlier days developed gangrene after consuming Arsenic for his wound in the operation theatre and the hypothesis was confirmed by many like Dr. J. T. Kent and Boenninghausen. All the above mentioned scientific methods were followed while experimenting in the field of Homoeopathy.

Accurate registration of symptoms, following correct methodology before concluding facts, and proper inferential facts for discovery must be stated. All these criteria were fulfilled by careful observation, recording and rigorous study for years before writing *Materia Medica Pura*. Therefore, Homoeopathy is based on a solid foundation of scientific principles.⁵

How does homoeopathy work?

Homoeopathy has received a lot of criticism for its inadequate research on its mode of action because while preparing a Homoeopathic drug it goes through a series of dilutions, Jacques Benveniste who was head of allergy and inflammation immunology at the French biomedical research agency INSERM (Institut de la Santé et de la Recherche Médicale), proved one fragment of Homoeopathy. The discovery was made when one of the members of the staff did an allergy test on a homoeopathic dilution devised by Benveniste and, to their surprise, they obtained a positive result, and thus they started experimenting.

Their result was published in *Nature* in 1988 which created a stir. The test uses polymorphonuclear basophils. Whenever the IgE antibodies on the surface are exposed to anti-IgE antibodies, they degranulate and release histamine. The INSERM researchers claimed that the basophils degranulated when the researchers used anti-IgE diluted to 1×10^{120} . At a dilution of 1×10^{14} , no assay would contain a single molecule of IgE, yet Benveniste demonstrated degranulation when no molecule was present in anti-IgE serum.

Also, this effect was only visible if the subsequent dilutions were subject to vigorous agitation. This, the authors suggested, is a submolecular organization of water-water memory.⁶

In another study by IIT-Bombay, the following was published depicting the action of Homoeopathic medicines. The medicines used were of 30C and 200C potency showing dilution factors of 10^{60} and 10^{400} respectively. These dilution factors are larger in magnitude than Avogadro's number which is 6.022×10^{23} , so theoretically it does not contain a molecule as an active material. The metal derived medicine samples were acquired from a reputable company. For the first time using Transmission Electron Microscopy (TEM), electron diffraction and chemical analysis by inductively coupled plasma-atomic emission spectroscopy (ICP-AES), the presence of physical matter in the above-mentioned dilutions in the form of nanoparticles of the starting metal medicinal entity and their aggregates.⁷ HR-TEM and STEM methods were used to test for inorganic salts. The test for

inorganic salts showed the presence of nanoparticles even till 1M potency having an enormous amount of dilution factor of 10^{2000} . The physiochemical test was conducted for metals and inorganic medicines showing the presence of nanoparticles. It was further noted that the nanoparticles developed a coat of silica. The particles were embedded in a meso-microporous silica layer via interfacial encapsulation. These coatings were observed in both metal and inorganic medicinal dilutions. On the basis of the above studies, a universal hypothesis was proposed that all homoeopathic medicines contain silica coated nanoparticles dispersed in a solvent.⁸

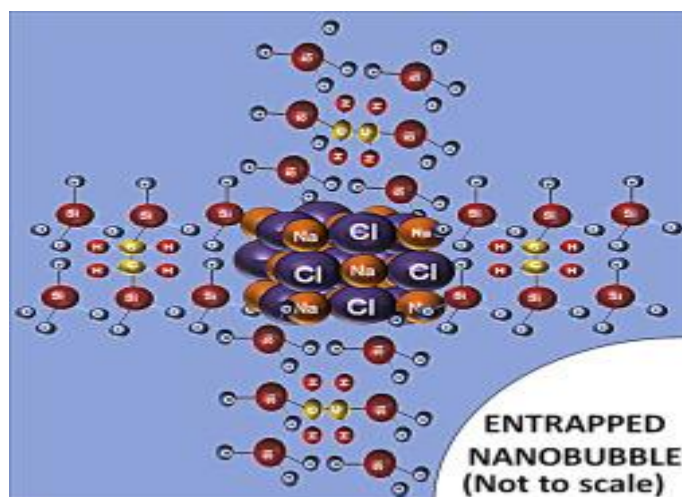


Fig. 1: Entrapped nanobubble, showing Homoeopathic physical entity with a silica coat

Another study showing the mechanism of action by Homoeopathic medicines was published under the name 'Metal nanoparticles induced hermetic activation: a novel mechanism of homoeopathic medicines'. This study shows that despite no presence of a physical entity in 30C and 200C potency having enormous dilution factors of 10^{60} and 10^{400} respectively, medicines having just femtograms/ml of starting material induced hermetic activation independent of proliferation by increasing intracellular protein synthesis. The metal entity of the medicine was much lower than the synthetic NP's ($\mu\text{g/ml}$) used in other studies.

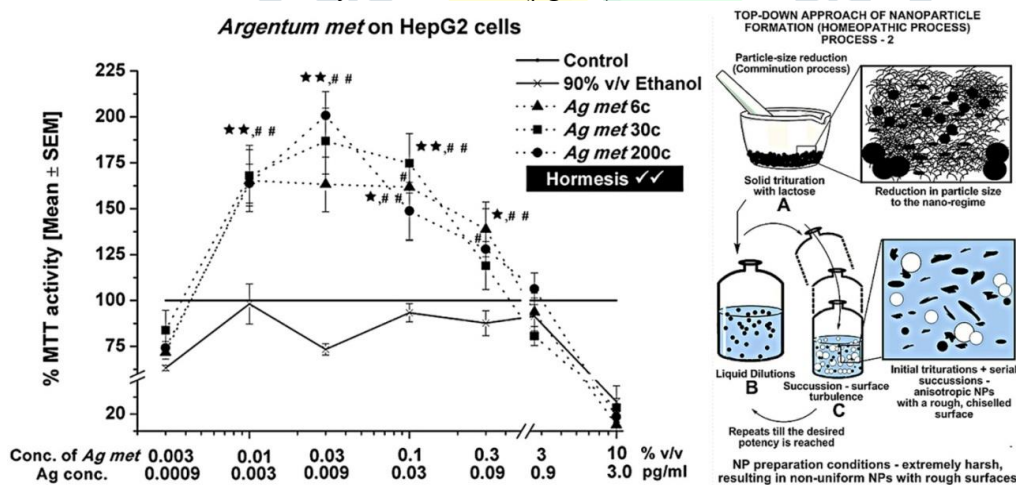


Fig. 2: metabolic cell activity using various homoeopathic dilutions⁹

In addition to this, many double-blind clinical trials were conducted on the efficacy of homoeopathic medicines. In a study of rheumatoid arthritis, 82% of the patients receiving homoeopathic treatment experienced improvement, on the other hand only 21% of those who received a placebo experienced a similar amount of improvement.¹⁰

In another double-blind homoeopathy trial that was conducted in patients with dental neuralgic pain following a tooth extraction, 76% of those improved under Arnica and Hypericum.¹¹

The antiviral efficacy of homoeopathic drugs was proved in chicken embryos. In a double-blind study, eight out of ten Homoeopathic medicines demonstrated antiviral properties by inhibiting viruses in the chicken embryo.¹²

Ever since its inception Homoeopathy has been subject to criticism citing inadequate studies and research despite the ample number of studies conducted by IIT-Bombay and Benveniste mentioned above depicting its mode of action, mechanism and efficacy. Homoeopathy from its origin to execution and up till the discovery of nanoparticles in Homoeopathy as its starting material is based on fixed scientific principles. It was very carefully observed by Dr. Hahnemann; the hypothesis was formulated and tested many times with careful recording of symptoms. Examples and cases by Dr. Hahnemann mentioned in Organon of Medicine and various kinds of literature are scientific. Homoeopathy should not limit itself to the discovery of nanoparticles and conduct more basic collaborative research with modern faculties like IITs and not just clinical trials to prove. Homoeopathy needs many higher-quality clinical trials and randomized controlled trials (RCT). Modern medical studies, microbiological and physical studies should be conducted to lay down the scientific evidence on its action.

References-

1. Dr. Babu GN. Comprehensive Study of Organon. Uttar Pradesh (INDIA): B. Jain Publishers (P) Ltd. 2017. p. 22-25
2. Dr. Patidar S. Cardinal principles of homeopathy. [Online]. 2020 Jan 4 [cited 2022 April 4]; Available from: URL: <https://www.homeopathy360.com/2020/01/04/cardinal-principles-of-homeopathy/>
3. Homeopathy: what you need to know. [Online]. 2021 [cited 2022 April 4]; Available from: URL: www.nccih.nih.gov/health/homeopathy
4. Dr. Babu GN. Comprehensive Study of Organon. Uttar Pradesh (INDIA): B. Jain Publishers (P) Ltd. 2017. p. 22-25,351-5
5. Prof. (Dr.) Nanda LK. Fundamentals of Homoeopathic Materia Medica. First Reprint Edition. New Delhi (INDIA): Indian Books & Periodicals Publishers. 2015. p. 110-17
6. Watts G. Jacques Benveniste. BMJ. 2004 Nov 27 [cited 2022 April 4];329(7477):[1290]. PMID: PMC534457. Available from: URL <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC534457/>
7. Temgire MK, Suresh AK, Kane GS, Bellare J. Extreme homeopathic dilutions retain starting materials: A nanoparticulate perspective. [Online] 2010 Oct [cited 2022 April 4]; 99(4):[231-42]. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S1475491610000548>
8. Temgire MK, Suresh AK, Kane GS, Bellare J. Establishing the interfacial nano-structure and elemental composition of homeopathic medicines based on inorganic salts: a scientific approach. [Online] 2016 May [cited April 4]; 105(2):[160-72]. Available from: URL <https://www.sciencedirect.com/science/article/abs/pii/S1475491615000740?via%3Dihub>
9. Chikramane PS, Suresh AK, Kane GS, Bellare J. Metal nanoparticle induced hermetic activation; a novel mechanism of homeopathic medicines. [Online] 2017 Aug [cited April 4];106(3):[135-44]. Available from: URL <https://www.sciencedirect.com/science/article/abs/pii/S1475491617300450>
10. Dr. Mandal PP, Dr. Mandal B. A textbook of homoeopathic pharmacy. 3rded. Kolkata (INDIA): New Central Book Agency (P) Ltd. 2012. p. 495
11. Dr. Mandal PP, Dr. Mandal B. A textbook of homoeopathic pharmacy. 3rded. Kolkata (INDIA): New Central Book Agency (P) Ltd. 2012. p. 495
12. Dr. Mandal PP, Dr. Mandal B. A textbook of homoeopathic pharmacy. 3rded. Kolkata (INDIA): New Central Book Agency (P) Ltd. 2012. p. 495