Review Article

Homoeopathic nosodes, a neglected approach for epidemics: A critical review

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Abstract

Background: Nosodes are the homoeopathic medicines prepared from diseased products of biological origin. These are commonly used in clinical practice for the prophylaxis and treatment of ailments including infectious diseases. **Objective:** This review aims at the usage of nosodes for the management of epidemics. **Methods:** The homoeopathic research literature was searched to find examples of the use of nosodes in different ways and to evaluate their role and position in homoeopathic practice with special reference to epidemic diseases. **Results:** Research evidence for use of the nosodes as prophylactics and for the treatment of various infectious and non-infectious diseases is emerging. Nosodes such as *Meningococcinum*, *nosoLEP* and *Malaria officinalis* have been used successfully in controlling meningitis, leptospirosis and malaria, respectively. The use of nosodes as isopathy is somewhat acceptable in the mainstream medicine due to its similarity to vaccination. Although it is feasible to use nosodes in a short span of time and can be administered easily, the method of preparation and the safety issues are of much concern and therefore, should be used with utmost care. The safety issues outlined by the World Health Organization should be satisfied before their application in public health. **Conclusion:** The challenge for the future is to refine the method of preparation and to develop a harmonised way of preparing the nosodes, which is conducive to all the homoeopathic pharmacopoeias across the globe. Nosodes prepared as per the homoeopathic principles have potential to be used as prophylactics in epidemics, but only if there is sufficient experimental evidence of its effectiveness and safety.

Keywords: Epidemics, Homoeopathy, Nosodes

NTRODUCTION

Due to change in biodiversity, the epidemics of infectious diseases are now occurring more often, and are spreading faster and further than ever, across the regions of the world. The factors underlying this threat are biological, environmental and lifestyle changes, among others. A potentially deadly combination of newly emerging diseases, and the re-emergence of many long-established ones, demands urgent responses in all countries. Planning and preparation for epidemic prevention and control are essential. Despite the strengthening of health infrastructure, discovery of antibiotics, antivirals, etc., every epidemic poses a challenge to the government, policymakers, health professionals and population at large. As these are time-taking processes, leaders and healthcare policymakers are looking at the ancient knowledge of traditional systems of medicine, including Homoeopathy as in the present pandemic of COVID-19.

Homoeopathy, since its discovery, has recorded success in dealing with epidemics such as Spanish flu, cholera, plague,

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yellow fever, dengue, leptospirosis and chikungunya.^[2-5] During epidemics, there are two ways of finding homoeopathic prophylaxis: one is identifying a medicine on the basis of the symptoms of several patients suffering from the epidemic disease. The medicine which covers most of the symptoms is declared as Genus Epidemicus and is recommended for use as prophylaxis, as well as treatment.^[6] Such an approach has been found successful in the past in many epidemics.^[2,4] This is the shortest method of providing prophylactic cover to most of the population and is very economical. The second way is to develop a nosode (if not yet available) from the causative microorganism of the epidemic; the guidelines

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for the development of such nosodes are available in the Homoeopathic Pharmacopoeia of India (HPI).^[7]

The word 'Nosode' is derived from the Greek word 'Nosos' meaning 'disease'. By definition, nosodes comprise dilutions of pathogenic organs or tissues; causative agents such as bacteria, fungi, ova, parasites, virus particles and yeast; disease products; excretions or secretions. Nosodes are considered as homoeopathic medicines, if processed in accordance with a recognised homoeopathic pharmacopoeia in official use, or other officially recognised documents. Due to their diverse nature, it is recommended that nosodes be evaluated individually for safety assessment.^[7-9] When the nosodes are prepared from human gut microbiota, these are called bowel nosodes.^[10]

With the advent of Hahnemann's theory of the miasms and publication of 'The Chronic Diseases', [11] there was development of the use of miasmic organisms as potentised homoeopathic remedies. Hahnemann was the first to discover the nosode 'Ambra grisea' (morbid product found in the belly of the sperm whale, introduced in 1827; proved by him and his friends). Thereafter, earliest experiments with nosodes were carried out by Constantine Hering while he was in Surinam, Guiana, South America, between 1827 and 1833. Hering performed the first proving of Psorinum on himself. He originated the method of using a miasmic agent as a basis for a remedy, and it was he who coined the term 'nosode'. [12]

Since the discovery of Homoeopathy, more than 60 such nosodes have been used by homoeopathic practitioners, [13] and these play a vital role in homoeopathic clinical practice. They are considered as homoeopathic medicines if processed in accordance with a recognised homoeopathic pharmacopoeia in official use, or other officially recognised documents. Due to their diverse nature, it is recommended that nosodes be evaluated individually for safety assessment^[8] and further special precautions be taken with nosodes due to their intrinsic pathological nature and origin.

Depending on the nature of source material, the HPI has classified nosodes into the following four groups:^[14,15]

- N-I: Preparations made from bacterial endotoxins
- N-II: Preparations made from microorganisms capable of producing exotoxins
- N-III: Preparations made from purified toxins
- N-IV: Preparations made from microorganisms or diseased subjects.

The different types of nosodes are described in different textbooks of homoeopathic Materia Medica^[13,16] and included in different volumes of the HPI published by the Government of India.^[7,9,14,17,18]

In this era of antibiotics, it is becoming more apparent that however useful the antibiotics may be, they are often accompanied by undesirable side effects and render the patients responding adversely to their future use. Whereas, nosodes and sarcodes (like all other homoeopathic remedies) are very easy to administer and have negligible unwanted effects. They also help in regulating the organs of the body to function in a normal and healthy way and to treat and cure the patients as a whole.^[15]

Nosodes are used in different settings, practice as therapeutic remedy and public health as homoeoprophylaxis during epidemic outbreak of diseases. They are also used as therapeutic for both infectious and non-infectious diseases, as a first prescription or as an intercurrent remedy. The utility of nosodes in clinical practice is sporadic and not of much concern, whereas, during epidemics, it requires a lot of systematic thinking because it is to be used extensively in a large population. We will look at the evidence for each of these in this article and identify the role and position of nosodes in the management of epidemic diseases.

Use of Nosodes in Infectious and Non-Infectious Diseases

Homoeopathically prepared nosodes are used both for the treatment of non-infectious and infectious diseases and is popular in clinical practice, [19-21] for example, *Psorinum* for ailments from suppressed itch or skin disease, *Medorrhinum* for the sequel of suppressed gonorrhoea and *Syphilinum* for the history of suppression of primary syphilitic chancre. [22] According to a survey, 95% of homoeopathic physicians consider nosodes to be important in their clinical practice. [23] Similarly, a 2005 study reported that nosodes had been of vital importance for successful homoeopathic treatment of chronic ailments in an average of 41% of patient cases. [24] Nosodes also play an essential role in the successful homoeopathic treatment of farm livestock. [25] For patients, practitioners and professional organisations, they will continue to play an essential role in homoeopathic treatment. [23]

The rules for prescribing nosodes have been described by different stalwarts and experienced practitioners of Homoeopathy. [12,26,27] Their indications for prescribing are outlined below:

- As a constitutional medicine when the mental, physical generals and particulars are characteristics
- When well-chosen remedies fail to give relief
- When there is a lack of symptoms i.e., to clear up the case
- 'Never been well since' symptoms
- As miasmatic intercurrent medicine
- When there is a partial portrait of the disease and no medicine completely fits the case
- As homoeopathic prophylaxis
- As Genus Epidemicus
- As auto-nosodes.

However, the nosodes are to be prescribed cautiously as there are some contraindications identified for their prescription:

- In the active phase of the disease
- During the incubation of the disease
- In the acute explosive stage of the disease

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- During the active phase of a recurrent attack
- · Auto-nosodes, during the acute infectious disease
- Use below 200c or 30x potency.

Use of Nosodes as Homoeoprophylaxis in Epidemics/Pandemics

The history of using Homoeopathic medicines as homoeoprophylaxis is quite convincing. Use of nosodes in various epidemics in the past, although enthusiastic, invites criticism. Duba, a leading country in developing nosodes and successfully implementing it in its public health, has a vast experience of using nosodes as stand-alone or in combination with non-nosode homoeopathic medicines as homoeoprophylaxis. They have used these for various diseases such as hepatitis A, cholera, dengue, leptospirosis, swine flu, pneumococcal diseases and viral conjunctivitis. The Cuban experience created a significant interest internationally among both homoeopaths and the orthodox scientists willing to look at the positive results, even though the mechanism of action was deemed to be 'implausible' according to the orthodox pharmaceutical paradigm.

Meningococcal meningitis is a severe bacterial meningitis with significant mortality and morbidity worldwide. During an outbreak of meningococcal meningitis in 1974 at Guaratingueta, Sao Paulo, Brazil, homeoprophylaxis with *Meningococcinum* nosode was administered to 18,640 people. This study showed 95% effectiveness over 6 months. [32] A similar study during an outbreak of this condition in the city of Blumenau, Brazil, in 1998, saw the nosode administered voluntarily to 65,826 people aged between 0 and 20 over 3 days at the public health clinics. The programme provided 95% protection from the severe bacterial infection after 6 months and 91% after 12 months, and the results were statistically significant. [33] The authors from the above studies concluded that *Meningococcinum* had a protective effect against the disease and also increased the resistance to meningitis.

In 1987, Fox concluded that *Pertussin* 30c as a prophylactic for whooping cough was 82% effective. However, the results reported by English though have tendency to prevent whooping cough were statistically insignificant. Both studies suggested for large sample trials.^[34,35]

A randomised double-blind prospective study of thirty participants compared standard vaccination to *Influenzinum* homoeopathic medicine for 13 weeks. This study found equal efficacy of the two methods in the prevention of influenza, however, the vaccination cohort experienced greater adverse reactions.^[36]

In another blinded randomised controlled trial in children in Brazil, [37] wherein the homoeopathic medications used were either a homoeopathic nosode prepared from intact influenza A virus, or a homoeopathic complex frequently used in that region for influenza. This study showed a statistically significant reduction of influenza episodes in children

receiving either of the two homoeopathic treatments versus placebo. Another retrospective cohort study^[38] looking at the prophylactic use of the homoeopathic medicine, *Influenzinum*, however, did not show a protective effect. The less rigorous methodology of this study, as well as the use of a less specific homoeopathic medicine, could be accounted for the lack of effectiveness.

Further, there was a large-scale study by Bracho^[39] in Cuba, to contain leptospirosis, a zoonotic disease occurring in rainy seasons, which spreads through the urine of domestic and wild animals, and can cause serious infections such as meningitis, hepatitis and pneumonitis. The study, conducted in 2007, used homeoprophylactic interventions against the condition in three provinces of Cuba. They prepared a homeoprophylactic formulation from dilutions of four circulating strains of leptospirosis and administered orally to 2.3 million persons at high risk in an epidemic in a region affected by natural disasters. After the homeoprophylactic intervention, a significant decrease of the disease incidence was observed in the intervention regions compared to the non-intervention regions. The results were re-evaluated, and the findings were consistent with those of the earlier results.^[40]

Another such example is from Brazil. This country is continuously researching and developing nosodes for use in humans and animals. They have tested nosodes in meningitis and other genus epidemicus in dengue and flu.^[41]

During a dengue outbreak in Delhi in 1996, the Central Council for Research in Homoeopathy distributed *Dengueinum* 30 (prepared from the serum of person suffering from dengue fever) to 39,200 people who were not affected and residing in the adversely affected areas for preventing the dengue. Follow-up after 10 days revealed appearance of fever, headache and body ache in five persons only.^[42]

In India, homeoprophylaxis is also being used in the management of the Japanese Encephalitis epidemic in Andhra Pradesh state (undivided), where reports suggest that mortality has dropped from 1511 children (1993–1999) to 391 children (2000–2004) after homeoprophylaxis intervention (comprising of *Belladonna, Calcarea carbonica and Tuberculinum*) was introduced in 1999. [43] Here, the nosode *Tuberculinum* was used to prevent recurrence.

A homoeopathic drug *Malaria officinalis* 200 was used for the mass prophylaxis for malaria in high malaria transmission season in selected 28 villages of district Shahdol of Madhya Pradesh state. [44] Of the 28 villages, seven (25%) reported malaria case incidence ≤2 in 6-month period (July–December 2016). In the previous year, 23 (82%) villages reported the incidence of malaria as more than 2 in the same time period. Hence, the number of villages with 'bi-annual malaria case incidence rate' was reduced by 57%.

However, the use of nosodes for the prevention of epidemic diseases (isoprophylaxis) i.e., selected based on the 'principle of aetiological identity' without considering symptom-based

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individualisation and pathogenetic trials, is not supported by the homoeopathic epistemological model. As long as there are no reliable scientific evidences attesting to its efficacy and safety, 'isopathic immunisation' might not be indicated as a regular replacement of classical immunisation, as it would mean a transgression of the bioethical principles of 'beneficence' and 'non-maleficence'. Although many homoeopathic practitioners systematically indicate such a practice, it is condemned by homoeopathic institutions worldwide.^[45]

Nosode and Immunomodulation

A nosode has therapeutic potential for inducing cytotoxic effects and manifests by making changes in nuclear condensation, DNA fragmentation, reactive oxygen species generation and mitochondrial membrane potentials and for its inhibitory action on cell proliferation and cell migration; expression of telomerase reverse transcriptase and Top II genes and increasing the expression of pro-apoptotic genes. [46] Animal studies assessing the potential efficacy of nosodes in the context of *Plasmodium berghei* infection also appear to demonstrate longer survival time in a murine model.[47] A study with Trypanosoma cruzi nosode on mice of different ages, infected with the concerned protozoa, modulated the inflammatory response with increased apoptosis and decreased serum levels of transforming growth factor-beta (TGF-β).^[48] Psorinum, when tested in 6x potency on cancer cell lines, showed greater anticancer effects in A549 cells than in others. It triggered apoptosis in A549 cells via both up- and down-regulations of relevant signal proteins, including p53, caspase-3, Bax and Bcl-2.[49] In an animal model study, Carcinosin 200 and Chelidonium 200, when administered alone, showed considerable ameliorative effect against p-DAB-induced hepatocarcinogenesis in mice, but the conjoint feeding of these two drugs appears to have had a slightly greater protective effect.^[50] A nosode prepared from the infectious influenza A virus (H3N2) on cell lines altered the cellular and biochemical features of MDCK and J774G8 cells.^[51] In a study, for the acute and subacute toxicity of dengue nosodes, changes in behaviour or mortality were observed in Wistar rats, with increased serum levels of tumour necrosis factor-α, interleukin (IL) IL-1β, IL-6, IL-12 and IgM, although there were no signs of toxicity. [52]

MERITS OF THE USE OF NOSODES IN EPIDEMICS

Vaccines, though effective, have several challenges in their development, such as long time needed to develop new vaccines (more than 5 years), stockpiles, high and complicated regulations, high costs, need of professional administration and medical supplies, cold chain maintenance for vaccine delivery, and coverage of population increases slowly, long time to confer protection and is limited to specific strains, usefulness for clusters of population and short- and long-term adverse reactions. [53] However, like all homoeopathic remedies, nosodes are very easy to administer as they can be given orally. The remedies are all natural, rarely have side effects and are not addictive. They are safe for adults, the elderly as well as

for infants and children.^[54] They are also very economical, in fact, far less expensive than vaccination.

CHALLENGES IN THE DEVELOPMENT OF NOSODES

Although nosodes are quite successful in clinical practice, challenges lie with safety issues in preparing the nosodes and a corresponding nosode for various pathogenic organisms. The number of nosodes developed as per their source till date are as follows: of bacterial origin (n = 38); viral origin (n = 04); other sources such as pathological organs or tissues; diseased products (excretions and secretions) (n = 22). The origin of nosodes and their developmental history highlight the challenges and need pondering. Figure 1 shows the nosode development in time series, since 1800 to present.

The various challenges that are being debated and discussed about nosodes are their preparation, source material, safety, standardisation, method of detection of virulence, method of collection, toxicity, use of modern technology, etc., which are a matter of concern, as mentioned by the World Health Organization.^[8]

FUTURE PERSPECTIVES OF NOSODE DEVELOPMENT

Researchers curious and interested in nosode development have addressed several steps for their preparation and improvement. [28,55] New nosodes are to be developed with improved standards with respect to safety and reproducibility.^[30] A repository of base preparations may be maintained for various nosode-related studies, such as shelf life. Nonetheless, nosodes developed in accordance with the safety guidelines by the WHO can help to handle epidemics/pandemics as a complement to conventional vaccines, and help the patients, government, stakeholders and healthcare professionals in a more robust manner. This can contribute in timely containment of the prevailing epidemic. Further, homoeopathic pathogenetic trial of the developed nosode will also help in therapeutic purpose for managing many chronic diseases. It is assumed that this way, nosodes can also be a boon for the fight against antimicrobial resistance across the globe. [56,57]

CONCLUSION

The challenge for the future is to refine the method of preparation of nosodes and to develop a harmonised way of preparing them, which is conducive to all the homoeopathic

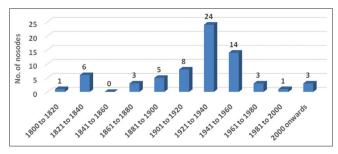


Figure 1: Timeline of nosode development

pharmacopoeias across the globe. The point remains that the nosodes prepared as per the homoeopathic principles do have a potential to be used as prophylactics in epidemics, but only if there is an experimental evidence of their effectiveness and safety.

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REFERENCES

- World Health Organization. Managing Epidemics: Key Facts about Major Deadly Diseases. Geneva: World Health Organization; 2018. p. 260.
- Jacobs J. Homeopathic prevention and management of epidemic diseases. Homeopathy 2018;107:157-60.
- Winston J. Some history of the treatment of epidemics with Homeopathy. [Internet]. Available from: https://www.homeopathycenter.org/ treatment-epidemics-homeopathy-history. [Last cited on 2020 May 02].
- Shepherd D. Homoeopathy in Epidemics. England: Health Science Press; 1967.
- Little D. The Prevention of Epidemic Diseases by Homoeopathy. [Internet]. Available from: http://www.simillimum.com/education/little-library/case-management/pedh/article.php. [Last cited on 2020 May 11].
- Hahnemann S. Organon of Medicine. 5th and 6th ed. New Delhi: B Jain Publishers (Pvt) Ltd.; 2004.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. VI. The Ministry; New Delhi: Government of India; 1990. p. 1-234.
- World Health Organization. Safety Issues in the Preparation of Homeopathic Medicines. Geneva: World Health Organization; 2009. p. 63.
- Ministry of Health and Family Welfare (Govt. of India). Homoeopathic Pharmacopoeia of India. Vol. 1. New Delhi: Government of India; 1971. p. 283.
- Cummings S. History and development of the bowel nosodes. Br Homeopath J 1988;77:72-7.
- Hahnemann S. The Chronic Diseases: Their Peculiar Nature and Their Homeopathic Cure. 1st ed. New Delhi: B Jain Publishers (Pvt) Ltd.; 2007.
- Little D. The Prevention of Epidemic Diseases by Homoeopathy [Internet]. Available from: http://www.simillimum.com/education/littlelibrary/case-management/pedh/article.php. [Last cited on 2020 Apr 26].
- Julian OA. Materia Medica of the Nosodes with Repertory. New Delhi: Reprint ed. B Jain Publishers (Pvt) Ltd.; 2003.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. 6., 1st ed. New Delhi: The Ministry; 1983. p. 136-7.
- Sankar K, Jadhav AP. Nosodes and Sarcodes. Indian J Tradit Knowl 2017;16:158-63.
- 16. Paterson J. The bowel nosodes. Br Homeopath J 1950;40:153-62.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. 7. F. New Delhi: The Ministry; 1999. p. 138.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. 8. New Delhi: The Ministry. 2000.
- Dey SP. Clinical Experience with Some Nosodes. Kolkata: New Central Book Agency (P) Ltd.; 2003. p. 104.
- Hoa JH. Carcinosin: A clinical and pathogenetic study. Br Homeopath J 1963;52:189-99.
- Foubister DM. The carcinosins: With special reference to paediatrics. Br Homeopath J 1974;63:165-9.
- 22. Allen HC. Keynote and Characteristics with Comparisons of Some of

- the Leading Remedies of the Materia Medica with Bowel Nosode. Low Priced ed. New Delhi: B Jain Publishers (Pvt) 2002.
- European Coalition on Homeopathic and Anthroposophic Medicinal Products (ECHAMP). [Internet]. Brussel: ECHAMP; c2016. Nosodes. [about 1 screen]. Available from: https://echamp.eu/our-sector/practice-and-evidence/products/nosodes. [Last cited on 2020 Apr 27].
- European Central Council of Homeopaths. Nosodes in Homeopathy Practice: An ECCH Survey; 2008. [Internet] Europe: ECCH; 2008. Available from: https://www.aeha-buendnis.de/wp-content/ uploads/2019/11/Nosodes-in-homeopathy-practice-ECCH-survey-July-2008.pdf.
- Doehring C, Sundrum A. Efficacy of homeopathy in livestock according to peer-reviewed publications from 1981 to 2014. Vet Rec 2016;179:628.
- Patel B, Mashru R. Viral nosodes as an alternative to vaccination: An update. J Immunol Vaccine Technol 2017;2:1-6.
- Mathur KN. Principles of Prescribing: Collected from Clinical Experiences of Pioneers of Homoeopathy. New Delhi: B Jain Publishers (Pvt) Ltd.; 2000.
- Golden I. Large scale homœoprophylaxis: Results of brief and long-term interventions. Am J Homeopath Med 2019;12:31-7.
- Saine A. Homeopathy in times of epidemics: A brief overview. In Liga Medicorum Homoeopathica Internationalis. [Internet] Leipzig, Germany; Liga Medicorum Homeopathica Internationalis 2017. [Conference paper] Available from: http://www.lmhi-congress-2017. de/wp-content/uploads/2017/07/Proceedings_Saine_DF05-01_EN.pdf [Last accessed on 2020 May 18].
- Rieder MJ, Robinson JL. 'Nosodes' are no substitute for vaccines. Paediatr Child Health 2015;20:219-22.
- 31. Bracho G, Golden I. A brief history of homeoprophylaxis in cuba 2004-2014. Homoeopath Links 2016;29:128-34.
- 32. Castro D, Nogueira G. Use of the nosode meningococcinum as a preventive against meningitis. J Am Inst Homeopath 1975;68:211-9.
- Mroninski C, Adriano EJ, Mattos G. Meningococcinum: Its protective effect against Meningococcal disease. Homeopath Links 2001;14:230-4.
- 34. English JM. Pertussin 30-preventive for whooping cough? A pilot study. Br Homeopath J 1987;76:61-5.
- 35. Fox AD. Whooping cough prophylaxis with Pertussin 30. Br Homeopath J 1987;76:69-70.
- Frost C. A double blind study on the comparative efficacy of influenza vaccination and influenzinum 7 CH. Faculty of Health Sciences, Technikon Witwatersrand; 2004.
- Siqueira CM, Homsani F, da Veiga VF, Lyrio C, Mattos H, Passos SR, et al. Homeopathic medicines for prevention of influenza and acute respiratory tract infections in children: Blind, randomized, placebo-controlled clinical trial. Homeopathy 2016;105:71-7.
- 38. Marinone C, Bastard M, Bonnet PA, Gentile G, Casanova L. Effectiveness of preventive treatment by Influenzinum in the winter period against the onset of influenza-like illnesses. Therapie 2017;72:465-74.
- Bracho G, Varela E, Fernández R, Ordaz B, Marzoa N, Menéndez J, et al. Large-scale application of highly-diluted bacteria for Leptospirosis epidemic control. Homeopathy 2010;99:156-66.
- Golden I, Bracho G. A reevaluation of the effectiveness of homoeoprophylaxis against leptospirosis in Cuba in 2007 and 2008.
 J Evid Based Complementary Altern Med 2014;19:155-60.
- Mosley A, Fibert P. Written Evidence Submitted by the Society of Homeopaths (AMR005); 2013.
- 42. CCRH News Letter No.23. Dengueinum. Central Council for Research in Homoeopathy; New Delhi: 1996;????:???.
- 43. Government of Andhra Pradesh. Japanese Encephalitis: Homoeopathic Prevention Programme. Hyderabad; Government of Andhra Pradesh:
- Pandey R, Gupta S, Singh AR, Gupta J, Kabirpanthi V. Effectiveness of medicine malaria Off 200, as mass prophylaxis against malaria in the high-risk villages of Shahdol, Madhya Pradesh. Int Arch Biomed Clin Res 2019;5:1-6.
- 45. Teixeira MZ. Isoprophylaxis is neither homeoprophylaxis nor homeopathic immunization, but isopathic immunization unsupported by the homeopathic epistemological model: A response to Golden. Int J High Dilution Res 2014;13:54-82.
- 46. Khuda-Bukhsh AR, Mondal J, Shah R. Therapeutic potential of HIV

pharmacopoeias across the globe. The point remains that the nosodes prepared as per the homoeopathic principles do have a potential to be used as prophylactics in epidemics, but only if there is an experimental evidence of their effectiveness and safety.

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REFERENCES

- World Health Organization. Managing Epidemics: Key Facts about Major Deadly Diseases. Geneva: World Health Organization; 2018. p. 260.
- Jacobs J. Homeopathic prevention and management of epidemic diseases. Homeopathy 2018;107:157-60.
- Winston J. Some history of the treatment of epidemics with Homeopathy. [Internet]. Available from: https://www.homeopathycenter.org/treatment-epidemics-homeopathy-history. [Last cited on 2020 May 02].
- Shepherd D. Homoeopathy in Epidemics. England: Health Science Press; 1967.
- Little D. The Prevention of Epidemic Diseases by Homoeopathy. [Internet]. Available from: http://www.simillimum.com/education/little-library/case-management/pedh/article.php. [Last cited on 2020 May 11].
- Hahnemann S. Organon of Medicine. 5th and 6th ed. New Delhi: B Jain Publishers (Pvt) Ltd.; 2004.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. VI. The Ministry; New Delhi: Government of India; 1990. p. 1-234.
- World Health Organization. Safety Issues in the Preparation of Homeopathic Medicines. Geneva: World Health Organization; 2009. p. 63.
- Ministry of Health and Family Welfare (Govt. of India). Homoeopathic Pharmacopoeia of India. Vol. 1. New Delhi: Government of India; 1971. p. 283.
- Cummings S. History and development of the bowel nosodes. Br Homeopath J 1988;77:72-7.
- Hahnemann S. The Chronic Diseases: Their Peculiar Nature and Their Homeopathic Cure. 1st ed. New Delhi: B Jain Publishers (Pvt) Ltd.; 2007.
- 12. Little D. The Prevention of Epidemic Diseases by Homoeopathy [Internet]. Available from: http://www.simillimum.com/education/little-library/case-management/pedh/article.php. [Last cited on 2020 Apr 26].
- Julian OA. Materia Medica of the Nosodes with Repertory. New Delhi: Reprint ed. B Jain Publishers (Pvt) Ltd.; 2003.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. 6., 1st ed. New Delhi: The Ministry; 1983. p. 136-7.
- Sankar K, Jadhav AP. Nosodes and Sarcodes. Indian J Tradit Knowl 2017;16:158-63.
- 16. Paterson J. The bowel nosodes. Br Homeopath J 1950;40:153-62.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. 7. F. New Delhi: The Ministry; 1999. p. 138.
- Government of India. Ministry of Health and Family Welfare. Homoeopathic Pharmacopoeia of India. Vol. 8. New Delhi: The Ministry. 2000.
- Dey SP. Clinical Experience with Some Nosodes. Kolkata: New Central Book Agency (P) Ltd.; 2003. p. 104.
- Hoa JH. Carcinosin: A clinical and pathogenetic study. Br Homeopath J 1963;52:189-99.
- Foubister DM. The carcinosins: With special reference to paediatrics. Br Homeopath J 1974;63:165-9.
- 22. Allen HC. Keynote and Characteristics with Comparisons of Some of

- the Leading Remedies of the Materia Medica with Bowel Nosode. Low Priced ed. New Delhi: B Jain Publishers (Pvt) 2002.
- European Coalition on Homeopathic and Anthroposophic Medicinal Products (ECHAMP). [Internet]. Brussel: ECHAMP; c2016. Nosodes. [about 1 screen]. Available from: https://echamp.eu/our-sector/practice-and-evidence/products/nosodes. [Last cited on 2020 Apr 27].
- European Central Council of Homeopaths. Nosodes in Homeopathy Practice: An ECCH Survey; 2008. [Internet] Europe: ECCH; 2008. Available from: https://www.aeha-buendnis.de/wp-content/ uploads/2019/11/Nosodes-in-homeopathy-practice-ECCH-survey-July-2008.pdf.
- Doehring C, Sundrum A. Efficacy of homeopathy in livestock according to peer-reviewed publications from 1981 to 2014. Vet Rec 2016;179:628.
- Patel B, Mashru R. Viral nosodes as an alternative to vaccination: An update. J Immunol Vaccine Technol 2017;2:1-6.
- Mathur KN. Principles of Prescribing: Collected from Clinical Experiences of Pioneers of Homoeopathy. New Delhi: B Jain Publishers (Pvt) Ltd.; 2000.
- Golden I. Large scale homœoprophylaxis: Results of brief and long-term interventions. Am J Homeopath Med 2019;12:31-7.
- Saine A. Homeopathy in times of epidemics: A brief overview. In Liga Medicorum Homoeopathica Internationalis. [Internet] Leipzig, Germany; Liga Medicorum Homeopathica Internationalis 2017. [Conference paper] Available from: http://www.lmhi-congress-2017. de/wp-content/uploads/2017/07/Proceedings_Saine_DF05-01_EN.pdf [Last accessed on 2020 May 18].
- Rieder MJ, Robinson JL. 'Nosodes' are no substitute for vaccines. Paediatr Child Health 2015;20:219-22.
- 31. Bracho G, Golden I. A brief history of homeoprophylaxis in cuba 2004-2014. Homoeopath Links 2016;29:128-34.
- 32. Castro D, Nogueira G. Use of the nosode meningococcinum as a preventive against meningitis. J Am Inst Homeopath 1975;68:211-9.
- Mroninski C, Adriano EJ, Mattos G. Meningococcinum: Its protective effect against Meningococcal disease. Homeopath Links 2001;14:230-4.
- 34. English JM. Pertussin 30-preventive for whooping cough? A pilot study. Br Homeopath J 1987;76:61-5.
- 35. Fox AD. Whooping cough prophylaxis with Pertussin 30. Br Homeopath J 1987;76:69-70.
- Frost C. A double blind study on the comparative efficacy of influenza vaccination and influenzinum 7 CH. Faculty of Health Sciences, Technikon Witwatersrand; 2004.
- Siqueira CM, Homsani F, da Veiga VF, Lyrio C, Mattos H, Passos SR, et al. Homeopathic medicines for prevention of influenza and acute respiratory tract infections in children: Blind, randomized, placebo-controlled clinical trial. Homeopathy 2016;105:71-7.
- 38. Marinone C, Bastard M, Bonnet PA, Gentile G, Casanova L. Effectiveness of preventive treatment by Influenzinum in the winter period against the onset of influenza-like illnesses. Therapie 2017;72:465-74.
- Bracho G, Varela E, Fernández R, Ordaz B, Marzoa N, Menéndez J, et al. Large-scale application of highly-diluted bacteria for Leptospirosis epidemic control. Homeopathy 2010;99:156-66.
- Golden I, Bracho G. A reevaluation of the effectiveness of homoeoprophylaxis against leptospirosis in Cuba in 2007 and 2008.
 J Evid Based Complementary Altern Med 2014;19:155-60.
- 41. Mosley A, Fibert P. Written Evidence Submitted by the Society of Homeopaths (AMR005); 2013.
- 42. CCRH News Letter No.23. Dengueinum. Central Council for Research in Homoeopathy; New Delhi: 1996.
- 43. Government of Andhra Pradesh. Japanese Encephalitis: Homoeopathic Prevention Programme. Hyderabad; Government of Andhra Pradesh:
- Pandey R, Gupta S, Singh AR, Gupta J, Kabirpanthi V. Effectiveness of medicine malaria Off 200, as mass prophylaxis against malaria in the high-risk villages of Shahdol, Madhya Pradesh. Int Arch Biomed Clin Res 2019;5:1-6.
- 45. Teixeira MZ. Isoprophylaxis is neither homeoprophylaxis nor homeopathic immunization, but isopathic immunization unsupported by the homeopathic epistemological model: A response to Golden. Int J High Dilution Res 2014;13:54-82.
- 46. Khuda-Bukhsh AR, Mondal J, Shah R. Therapeutic potential of HIV

Nayak and Varanasi: Homoeopathic nosodes in epidemics

Los nosodos homoeopáticos, un enfoque descuidado para las epidemias: Una revisión crítica.

Antecedentes: Los nosodes son los medicamentos homoeopáticos preparados a partir de productos enfermos de origen biológico. Estos se utilizan comúnmente en la práctica clínica para la profilaxis y el tratamiento de dolencias incluyendo enfermedades infecciosas. Objetivo: Esta revisión tiene como objetivo el uso de los nosodos para el manejo de epidemias. Métodos: Se realizó una búsqueda en la literatura de investigación homeopática para evaluar el uso de los nodes en la práctica homeopática con especial referencia a las enfermedades epidémicas. Resultados: Se están surgiendo pruebas de investigación para el uso de los nosodes como profilácticos y para el tratamiento de diversas enfermedades infecciosas y no infecciosas. Los nosodes como Meningococcinum, nosoLEP y Malaria officinalis se han utilizado con éxito en el control de la meningitis, la leptospirosis y la malaria, respectivamente. El uso de nosodes como preparaciones isopáticas es algo aceptable en la medicina convencional debido a su similitud con la vacunación. Aunque es factible utilizar los nodes en un corto lapso de tiempo y estos pueden ser administrados fácilmente, el método de su preparación y sus problemas de seguridad son de gran preocupación.por lo tanto, los nodes deben ser desarrollados con el máximo cuidado. Las cuestiones de seguridad esbozadas por la Organización Mundial de la Salud deben satisfacerse antes de su aplicación en la salud pública. Conclusión: El reto para el futuro es perfeccionar el método de preparación y desarrollar una manera armonizada de preparar los nodes que sea conducente a todas las farmacopeas homeopática en todo el mundo. Los nosodes preparados según los principios homoeopáticos tienen potencial para ser utilizados como profilácticos en epidemias, pero sólo si hay suficiente evidencia experimental de su eficacia y seguridad.

Homöopathische Nosoden, ein vernachlässigter Ansatz für Epidemien: Eine kritische Überprüfung

Hintergrund: Nosoden sind die homöopathischen Arzneimittel, die aus biologischen Ursprungs. Diese werden häufig in der klinischen Praxis zur Prophylaxe und Krankheiten, einschließlich Infektionskrankheiten. Ziel: Diese Überprüfung zielt auf die Nutzung Nosodes für die Bewältigung von Epidemien. Methode: Die homöopathische Forschungsliteratur wurde die Verwendung von Nosoden in der homöopathischen Praxis unter besonderer Seuchen. Ergebnisse: Forschungsnachweise für die Verwendung von Nosoden als Prophylaxe und für die Behandlung verschiedener infektions- und nicht-infektiöser Krankheiten entsteht. Nosoden wie Meningokokken, NosoLEP und Malaria officinalis wurden erfolgreich bei Bekämpfung von Meningitis, Leptospirose bzw. Malaria. Die Verwendung von Nosoden als isopathische Präparate ist in der Mainstream-Medizin aufgrund ihrer Ähnlichkeit mit Impfungen. Obwohl es möglich ist, Nosoden in kurzer Zeit und diese leicht verabreicht werden können, die Methode ihrer Zubereitung und ihre Sicherheitsfragen große Sorge. Daher sollten die Nosoden mit größter Sorgfalt entwickelt werden. Die Sicherheit Von der Weltgesundheitsorganisation dargelegten Fragen sollten vor ihrer Anwendung in Volksgesundheit. Fazit: Die Herausforderung für die Zukunft besteht darin, die Zubereitungsmethode zu verfeinern und eine harmonisierte Art der Herstellung von Nosoden zu entwickeln, die allen homöopathische Arzneibücher auf der ganzen Welt. Nosoden, die nach den homöopathischen Prinzipien hergestellt werden, haben das Potenzial, als Prophylaxe bei Epidemien eingesetzt zu werden, hinreichende experimentelle Beweise für ihre Wirksamkeit und Sicherheit.

顺势疗法nosodes,流行病的一个被忽视的方法:一个批判性的审查

背景: Nosodes 是从生物来源的患病产品制备的顺势疗法药物。这些在临床实践 中常用于预防和治疗疾病,包括传染病。**客观:**这次审查的目的是在流行病管理中使用nosodes。**方法:** 顺势疗法研究文献进行搜索,评估在顺势疗 法实践中使用 nosodes,特别参考流行病。**结果:**正在出现关于使用nosodes作为预防剂和治疗各种传染性 和非传染性疾病的研究证据。Nosodes 像脑膜炎球菌一样,nosoLEP 和疟疾officinalis 分别被成功地用于控制脑膜炎,钩端螺旋体病和疟疾。使用nosodes作为等疗法制剂在主流医学中是可以接受的,因为它与接种疫苗相似。虽然在短时间内使用nosodes是可行的,并且这些可以很容易地施用,但它们的制备方法和它们的安全问题是非常关注的。因此,应该非常谨慎地开发nosodes。 世界卫生组织概述的安全问题在应用于公共卫生之前应该得到满足。

结论: 未来的挑战是改进制备方法,并开发协调的制备方法,这有利于全球所有顺势疗法药典。根据顺势疗法原理准备的Nosodes有可能在流行病中用作预防剂,但前提是有足够的实验证据证明其有效性和安全性。