

Biochemistry in Homoeopathic System of Medicine

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Article History: | Received: 15.04.2023 | Accepted: 11.05.2023 | Published: 16.05.2023 |

Abstract: Background [1-3, 10, 20]: When Dr. John Paterson (1890-1955) of United Kingdom read out his paper on 'Bowel Nosodes' to the Rodanienne homoeopathic society at the meeting of the International Homoeopathic League Council in August 1949 at Lyon, France, he actually brought out the relation between biochemistry and homoeopathy. He not only presented the clinical aspects of the 'bowel nosodes' but also the biochemical analysis of each of the nosodes. Although Dr. Jacob Moleschott (1832-1893) and Dr. Justus Von Liebig (1803-1873) were the motivators to lay the fundamentals of biochemistry, the motivation could lead to the introduction of Biochemic system of medicine into homoeopathic therapeutics by Dr. Wilhelm Heinrich Schussler (1821-1898) after 24 years of Dr. Paterson's efforts i.e. in 1973. Dr. Schussler introduced more and more biodynamic explanations for therapeutics of mineral salts. The Biochemic system of medicine or the inorganic cell salt therapy is the oldest form of nutraceutical therapy approved and recognised by the World Health Organisation (WHO) as one of the complementary therapies. Dr. Schussler developed the Schussler tissue remedies using a unique system of cellular therapy, biochemistry (the chemistry of living tissues) which continue to be popular in homoeopathic therapeutics in current times. As each & every drug in Homoeopathy is only proved on human beings, all the drugs have a mental component as it is only human beings who can express their physical & mental symptoms during proving of the drugs as per the guidelines set by the Homoeopathic Research Councils (HRC) of each nation. In India, Central Council for Research in Homoeopathy, an autonomous body under the ministry of AYUSH lays out such guidelines. The article gains more relevance during the current COVID 19 pandemic which has precipitated the stress levels of population since March 2020 and most of them are more prone to physical and mental disorders during their life stage thus disturbing the biochemistry of the body. The biochemic system of in homoeopathic therapeutics tries to restore this disturbed biochemistry.

Keywords: Homoeopathic Materia Medica, Bowel Nosodes, Biochemic medicines, Constitutional medicine, Nosode, Sarcode, Bach Flower Remedy, HPI, Miasms.

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Outline of the Article [4-7, 13, 23]

Biochemistry is almost synergic to the homoeopathic system of medicine as a common man refers to the Biochemic medicines that are hugely popular in our nation. These medicines fulfil the triad

criteria of essential medicines as per the National List of Essential Medicines (NLEM). The triad criteria is that these essential medicines need to be effective clinically, safe clinically and should be without side effects. This article focuses on biochemical applications

in homoeopathic system of medicine. The experience of three centuries of use of homoeopathy has helped us to deduce that homoeopathy is clinically effective, cost effective and has no side effects. Here, biochemistry has a big role to play. As all the homoeopathic medicines go through human clinical trial or are proved on human beings, all medicines have a mental aspect during the trials. This shows that there are N numbers of medicines in homoeopathy for the physical, mental and emotional issues that all of go through in our lives. The current article deals with exploring how biochemistry adds a catalytic feature to this process.

The article also explores the biochemistry behind a group of homoeopathic medicines that are called 'bowel nosodes'. Further, the article explores the source of homoeopathic medicines where the medicines prepared from fungi is looked into through the biochemistry mirror. The article delves into the past, present and future of pharmacopeia in homoeopathy through the fungi as a parasitic source in preparation of homoeopathic medicines.

The current piece deals with some of the leading medicines and their relation to biochemistry and clinical application based on the clinical experience of the lead author. Readers are requested to adhere to the biochemistry related treatment protocol discussed here in this article.

The reader will get an idea of the problem of application of biochemistry in a scientific laboratory as the medicines prepared are highly diluted. Thus, there is a huge group that are the 'anti' homoeopathy group at global & national level. However, through the eyes of clinical health and its effectiveness, the homoeopathic system of the AYUSH platform has been a boon to the masses especially demonstrated recently during the recent pandemic. The pandemic has escalated the popularity of AYUSH and homoeopathy further. In the absence of effective therapy in the modern medicine for the pandemic and viral diseases, the article peeps through what homoeopathy can offer to deal with future issues through medicines that fulfil the triad criteria of essential medicines as per the National List of Essential Medicines (NLEM).

The 'anti' homoeopathy group must take note of the 'Arndt Schultz' law or 'Schultz' law is a claimed law concerning the effects of pharmaca or poisons in various concentrations. It states that for every substance small doses stimulate, moderate doses inhibit, large doses kill. Through the biochemistry lens, homoeopathic medicines fall into the category of small doses that stimulate the body.

INTRODUCTION [2, 10, 13, 20]

As discussed above, there are 12 tissue salts in the biochemic system of medicines in homoeopathy. These are Calcarea Sulph, Natrum Sulph, Kali Phos,

Natrum Phos, Calcarea Phos, Mag Phos, Ferrum Phos, Silicea, Kali Mur, Nat Mur, Calcarea Flour and Kali Sulph. These are Latin names of Calcium Sulphate, Sodium Sulphate, Potassium Phosphate, Sodium Phosphate, Calcium Phosphate, Magnesium Phosphate, Iron Phosphate, Silicea Tera, Potassium Murate, Sodium Murate, Calcium Flouride and Potassium Sulphate. These medicines are prepared in triturations and dilutions/potencies as per the Homoeopathic Pharmacopoeia of India (HPI).

The Ministry of AYUSH since November 2014 is using its network of public and private partners and here homoeopathy as a component is addressing the issue of disturbed biochemistry in the body.

About Bowel Nosodes [10, 13, 16, 21, 22]

Nosodes are the group of medicines that are prepared from the disease causing organisms or substances like toxins. The bowel nosodes are a series of remedies made from non-lactose forming bacteria of the human intestinal flora. These medicines were first developed by Dr. Edward Bach (1886-1936) and continued by John Paterson and later by his wife Elizabeth from 1920 to 1964. Dr. Paterson died in 1955 and his wife Elizabeth continued to work till 1964. The basic premise that Dr. Paterson theorised was that 'the bacterium is a concomitant of the pathology and not the cause'.

Besides the paper presentation at Lyon in 1949, Dr. Paterson wrote a paper on the medicine 'Sycotic Compound' in 1933 and in 1950, he published a 'book on summary of his experiences'.

Life starts with interfacing a nosode or biochemistry through bacteria for all of us as when we are born, the bowel is quickly populated by 'Escherichia Coli' and the first pro-biotic that the child receives naturally is the 'Bifidobacterium' from the breast milk. From this Bifidobacterium, homoeopathic medicines like 'Lac Humanum' and 'Lac Maternum' is prepared.

In 1928, Bach left London for Mount Vernon in Oxfordshire county and developed the Bach Flower Remedies that are exclusively applied in mental diseases thus restoring the altered biochemistry of the brain. There are 38 such remedies that are prescribed for single and exclusive mental symptoms for example the medicine 'Mimulus' is prescribed to get rid of 'fear'.

Biochemistry of Bowel Nosodes [10, 13]

As mentioned above, Dr. Paterson presented the detailed biochemistry of the following non-lactose fermenting organisms that are prescribed as homoeopathic medicine only in ultra-dilutions or potencies. The following table gives the details.

Table 1: Bio Chemistry of the Bowel Nosodes

Serial Number	Name of the non-lactose fermenting organism	Name of the homoeopathic medicine prepared from the organism	Biochemistry of the homoeopathic medicine
1.	Proteus Morganii and Morganella Morganni	Morgan (Bach) or Morgan Pure (Paterson)	Sulphur and Carbon are the two outstanding elements
2.	Proteus Vulgaris and Proteus Mirabilis	Proteus (Bach)	Chlorine is the outstanding element
3.	Bacillus Asiaticus, Bacillus Cloacae and Bacillus Freundii	Bacillus Number 7	Outstanding elements are Bromine and Iodine
4.	Salmonella Enteritidis	Bacillus Gartner (Bach)	Outstanding elements are Silicea, Phosphorus and Fluorine

Thus, using the biochemistry background, prescriptions can be made using the type of element present in the medicine. Take for example, Bacillus Number 7 can be prescribed for thyroid disorders, Bacillus Gartner can be prescribed for Fluorosis and Fibrosis. Morgan Pure can be prescribed for skin complaints and Proteus (Bach) can be prescribed for bad effects of skin treated with Chlorine say at the beauty parlour.

Fungi and Parasites as source of Homoeopathy [7]

There are many fungi and parasites that are the source of homoeopathic medicines. Some of these are constitutional or polychrest medicines that are prescribed for N number of complaints provided these medicines are indicated. Some of these are short acting medicines; the current article only focuses on these medicines through the eyes of biochemistry only. Take for example the medicine ‘Torula Cerevisae’, prepared from a fungus and is used only for constipation as it is yeast. As yeasts are good sources of B vitamins, this can be also prescribed in cases of deficiencies where the supplemental therapy approach is no longer effective.

The other example is ‘Malaria Officinalis’ that is prepared from the vegetable decay matter where the parasite survives. Hence, the medicine is prescribed for cases of chronic malaria and not acute ones. In the acute cases, the parasite thrives in the blood where as it thrives in the liver and spleen in chronic cases. Since the homoeopathic medicine is given orally, biochemistry tells us that the medicine will be effective through the action on the organs.

Another example is the medicine ‘Agaricus Muscarius’, prepared from mushrooms. Biochemistry tells us that mushrooms are a good source of the element ‘Copper’. Those anaemia cases that do not yield to iron supplements yield to copper supplements. Hence, using the knowledge of biochemistry, the medicine can be given in low doses as mother tinctures or triturations in homoeopathy to cases of anaemia not yielding to iron supplements.

The table below gives the names of the homoeopathic medicines prepared from the fungi and parasites.

Table 2: Homoeopathic medicines prepared from Fungi and Parasites

Serial Number	Latin Names/Botanical names	Common Names
1.	Agaricus Brazei Murill	Brazil Mushroom
2.	Agaricus Campanulatus	Mushroom
3.	Agaricus Campestris	Mushroom
4.	Agaricus Emeticus	Mushroom
5.	Bovista Lycoperdon	Puffball
6.	Candida Albicans	Thrush Fungus
7.	Candida Parasilosis	Thrush Fungus
8.	Cetraria Islandica	Iceland Moss
9.	Cordyceps Sinensis	Caterpillar Fungus
10.	Inonotus Obliquus	Chaga Mushroom
11.	Melaleuca Alternifolia	Tea Tree oil (used as anti fungus)
12.	Psilocybe Caerul	Psilocybe Mushroom
13.	Secale Cor	Ergot of Rye
14.	Usnea Barbata	Tree Moss
15.	Ustilago Maydis	Corn Smut
16.	Viscum Album	Mistle Toe (Parasite)

Way Forward [3, 5, 7]

As Non-Communicable diseases are increasing, through the help of biochemists, isolation of inflammatory markers like specific cytokines and enzymes related to specific metabolic diseases and ageing related issues are to be done. From these isolations, homoeopathic dilutions or potencies can be prepared. This is how the science of biochemistry can be applied in the development of homoeopathic therapeutics. This approach will only broaden the spectrum of biochemistry in homoeopathy. As mentioned above, the medicines will act as stimulators for the body.

Homoeopathic Approach through Biochemistry [7-18]

As already mentioned above, all Homoeopathic medicine has physical and mental symptoms as the drugs are proved on human beings. The above-mentioned homoeopathic medicines are primarily from four sources. These are H.C. Allen’s Key notes, Robin Murphy’s Materia Medica, Phatak’s Materia Medica & Boericke’s Materia Medica. These four text books are used to teach homoeopathic students who become qualified homoeopaths later. The

treatment plans for the HH disorders mentioned above are given below.

The issues like HH can be resolved through the Universal Health Coverage (UHC) where the AYUSH systems like homoeopathy can play an active role as it is cost effective. The network of private, public and corporate system can come handy here. The inclusion of the traditional systems like homoeopathy can play a vital role to achieve UHC in India as reinforced by a published article on the issue of UHC.

Homoeopathic Therapeutics and Biochemistry [14]

The treatment plan is on the lines of the lines of biochemistry of all patients/cases that take homoeopathic treatment. The first approach is the miasmatic approach. In homoeopathic system of medicine, miasms are disease causing dynamic influences that are infectious in nature. Miasmatically, if the patient has physiological issues only, the altered biochemistry occurs in the body. Hence, from the biochemical angle, anti Psorics are to be prescribed or medicines prescribed on the basis of biochemistry will be primarily anti Psorics. Psora is the miasm that causes functional disturbances in the body.

Burden of Disease [5, 7, 17, 19, 20]

Table 3: Prevalence of Blood Sugar among adults in India (Source- NFHS 5, 2019-21)

Indicator	Gender	Urban	Rural	Total
Percentage of Women age 15 years and above who have high blood sugar level (141-160mg/dl)	Female	6.7	5.9	6.1
Percentage of Women age 15 years and above who have very high blood sugar level (>160mg/dl)	Female	8.0	5.5	6.3
Percentage of Women age 15 years and above who have high or very high blood sugar level(>140mg/dl) or taking medicine to control blood sugar level	Female	16.3	12.3	13.5
Percentage of Men age 15 years and above who have high blood sugar level (141-160mg/dl)	Male	7.8	7.0	7.3
Percentage of Men age 15 years and above who have very high blood sugar level (>160mg/dl)	Male	8.5	6.5	7.2
Percentage of Men age 15 years and above who have high or very high blood sugar level(>140mg/dl) or taking medicine to control blood sugar level	Male	17.9	14.5	15.6

This reflects the magnitude of the problem in the country from the perspective of biochemistry as diabetes is a metabolic disorder with an altered biochemistry in the body. So males are more diabetic than females in India.

Currently, the Crude Death Rate includes Non-Communicable Diseases (NCD) deaths and this trend is catching up as NCDs have the upper hand than the Communicable Diseases (CD) as a result of epidemiological transition. Diabetes is one such NCD with an improper biochemistry.

In India, Homoeopathy is the third preferred system of treatment after Allopathy and Ayurveda. About 10% of the population depends on Homoeopathy for their health issues.

Homoeopathy is used by 10% of the population in India. So, out of the 1300 million populations, 130 million use Homoeopathy or 130 million use Homoeopathy for their health issues. These 130 million consist of all age groups i.e. infant to old age.

A section among the 15+ age group suffers from diabetes as per NFHS 5. Considering that, it is 2/3rd of the population in India (15-65+ year age group) or 100 crore or 1000 millions. Out of this 100 crores, 27% adults are diabetic or about 27 crores are diabetic. These people are at risk from the rest 73 crore. As 130 million use homoeopathy, 2/3rd of the users will be in 15-65+ year age group or 98 million. So if homoeopathy is integrated in to the diabetic battle in

India, 98 million people can be saved from being complicated diabetic cases. Application of biochemical concepts in homoeopathy will be a boon in this regard.

CONCLUSION [5, 7-16]

As all drugs in homoeopathy have a group of mental symptoms, Homoeopathy is and will be effective against metabolic disorders in general as these are induced by stress. The current article adds another feather in the Homoeopathic cap as it can deal with the probable upcoming of large number of cases of metabolic disorders in view of high stress levels due to the ongoing COVID 19 crisis. However, it should be also seen that along with constitutional/deep acting/polychrest homoeopathic medicines, specific medicines are also required to deal with the cases. Simultaneously, nutrition, counselling and all psychic health modalities like life style modification and stress reduction are adhered in each case.

In fact, the detailed case taking of a case & empathetic hearing are the elements of supportive therapy as metabolic cases are chronic and resistant. The Homoeopathic approach of case-taking/anamnesis exactly fits into the criteria of supportive therapy. Hence, as a part of treatment, the supportive therapy is inherent in Homoeopathic treatment. Green leafy vegetables & nuts are to be added in the diet in order to enable the body to improve organ functions and liver is one such organ. The vegetarians should be supplemented with Vitamin B12 & Zinc supplements as these are good for metabolic/biochemic health & diets of vegetarians lack these nutrients. The primary sources of these two supplements are sea food & non-vegetarian foods.

The Homoeopathic fraternity should be ready to cover the masses as there is no other therapeutic system that can cover the masses effectively while being economical and cost effective. Simultaneously, it has a wide range of medicines as seen in the contents of the sections mentioned above.

Declaration of the Lead Author

Prof. Shankar Das was the Ph.D. guide of the lead author at Tata Institute of Social Sciences, Mumbai. The lead author also certifies that he has expressed his personal opinion based upon his public health and clinical experiences. The treatment approach or the medicines suggested are only suggestive in nature.

ACKNOWLEDGEMENT

The lead author thanks Dr. Umakant, Dr. Pramod, Dr. Madan for their inputs in the Homoeopathic section and all the other co-authors for their inputs in the Non-Homoeopathic section.

Financial Support and Sponsorship: Nil.

Conflict of Interest: Nil.

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