

Historical Journey of Homoeopathy during Epidemic Diseases in the Light of 2019 Novel Coronavirus Pandemic

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ABSTRACT

Homoeopathy is a therapeutic system founded by German physician Dr Samuel Hahnemann in the late 1700's and has been used for 200 years around the world in acute and chronic disease conditions. Homoeopathy has also flourished during the times of epidemic diseases and the use of homoeopathic remedies as genus epidemicus and homoeoprophylaxis began with Hahnemann. Although the effectiveness of the homoeopathic remedies in epidemics has been scarcely proved by controlled studies, yet there is vast historical evidence which proves that homoeopathic remedies have been successfully used to prevent these conditions. The homoeopathic literature was searched to find out the historical evidences of the use of homoeopathic remedies during epidemics and pandemics. Homoeopathic treatment during epidemics is reviewed in eight diseases and their results are found for epidemics of Scarlet fever, Typhus, Cholera, Dysentery, Spanish flu, Diphtheria, Measles, Whooping cough. Also the prophylactic effect of homoeopathic medicines is found in Fourteen epidemic diseases namely Scarlet fever, Smallpox, Poliomyelitis, Meningitis, Whooping cough, Dengue, Cholera, Japanese Encephalitis, Leptospirosis, Diphtheria, Influenza, Hepatitis, Malaria, Chikungunya. Many clinical trials have also been conducted during the epidemics of Chikungunya, Influenza like illness, Dengue, Acute Encephalitis Syndrome/Japanese Encephalitis. The current novel Coronavirus disease, COVID-19, has rapidly spread over the globe and has been declared as pandemic by World Health Organization. Till now, no specific treatment or vaccine has emerged to

control this pandemic. However, many homoeopaths over different parts of the world have treated a wide range of COVID positive cases with different remedies. This review not only brings forward the success stories of homoeopathy during past epidemics but also presents its utility in the current pandemic.

Key words: COVID-19, Epidemic diseases, Homoeopathy, Homoeoprophylaxis, Immunity.

INTRODUCTION

The epidemic diseases are those diseases in which many individuals are affected very similarly from a similar cause which becomes contagious in crowded areas. These epidemics manifest a similar disease process which, if left to itself, ends either in death or in recovery within a limited time.

A smallpox epidemic in Greece in 430 BC that killed more than 30,000 people was one of the first-documented epidemics.^[1] Dr. Hahnemann even before the discovery of homoeopathy elaborately discussed various measures for preventing diseases in general with special reference to communicable diseases and importance of sanitation.^[2] It is interesting to note that homeopathy was invented in the same year as Jenner first practiced vaccination (1796).^[1]

Homoeopathy is founded upon principles based upon basic natural laws which remain firm and intact whether it is an acute case or the panics of epidemics.^[3]

Hahnemann intuited the concept of “contagious principle” as a vehicle capable of transmitting epidemic diseases. He described acute epidemic miasmas acquired through a “contagious principle”, which today could be equated to a microbe or virus infection.^[4] Close observation of the first cases in an epidemic of infectious diseases is exceedingly valuable to obtain the symptomatology of epidemic diseases.^[5] Hahnemann during the epidemic of Scarlatina founded that the indicative remedy given at that time stifles the fever in its beginning and was more efficacious than other known medicaments in removing the greater part of the after-sufferings following Scarlatina.^[3]

Recently, a new coronavirus (CoV) strain has become a matter of concern for human lives.^[6] Researchers at the Wuhan Institute of Virology called it novel coronavirus 2019 (nCoV-2019).^[7] The US Centers for Disease Control and Prevention (CDC) refers to it as 2019 novel coronavirus (2019-nCoV).^[8] Since the beginning of 21st Century, the current CoV outbreak is the third attack, previous ones being Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) epidemic in 2003 and Middle East Respiratory Syndrome coronavirus (MERS-CoV) epidemic in 2012. This outbreak seems to be challenging to manage considering the rapid spread via droplets and non availability of any effective vaccines or antiviral drugs.^[9] Vaccines, anti-viral medications, and antibiotics are considered to be the standard treatments for these diseases. However, difficulties with developing and disseminating immunizations, viral mutations, and the growing problem of antibiotic-resistant bacteria are undermining these approaches.^[1]

Many older patients who became severely ill from 2019-nCoV suffered from underlying illnesses like cardiovascular diseases, liver diseases, kidney diseases or malignant tumors. These non communicable diseases has become the aggravating factor for the adverse outcome of 2019-nCoV. The

percentage of deaths in 2019-nCoV patients with underlying conditions of cardiovascular diseases, diabetes, chronic respiratory diseases, hypertension and cancer contributes to 13.2%, 9.2%, 8%, 8%, 8.4% and 7.6% respectively whereas in patients with no pre existing condition contributes to 0.9% only.^[10]

Homoeopathy has an important role to play in case of epidemic diseases. Even the most severe and fearful epidemics like scarlet fever, cholera etc. have been encountered successfully by homoeopathic medicines.

WHO has recently called for “innovative” approaches for treating communicable diseases supporting the role of traditional medicines in maintaining the health of populations.^[1,11]

Homoeopathic concept of Prophylaxis

Hahnemann founded medicine, not on physics and chemistry, but on *the universal laws of Life and Motion*. He refers all the phenomena of health and disease under two names, "The Dynamis" and "The Life Force." *This is Hahnemann's greatest discovery, and the absolute bed-rock of his system.*^[12]

Homoeopathic concept of disease defines the cause as morbid dynamic agent which invades the dynamicity of a living organism and if could defeat the vital principle then produces the sign and symptoms characteristic of the morbid agent upon the body and mind of the victim. Any disease can be prevented by keeping the life force undisturbed. Homoeopathy provides a healthy condition by boosting this natural function of the vital principle of the organism through which it prevents and cures the disease.^[13]

Prophylaxis is the great preoccupation of all physicians and biologists. For homoeopathic prophylaxis in infectious diseases we need not hunt the bacteria or virus for the vaccination. This is because homoeopathic therapy is symptomatic and not materialistic and emphasis is on totality of symptoms as patient's disease and not on virus. Also it is

very difficult to prepare vaccine against such diseases as the viruses frequently change their genetic pattern each time they appear in the epidemic form. Interestingly, an epidemic requires different remedies when rages in different places. The prophylactic can be found by collecting the symptomatology of few patients of an epidemic in an area. This remedy can act as the curative as well as the preventive medicine during the specified epidemic for that area. A low potency of the preventive medicine is suggested as it works even in patients of unmanifested disease.^[14]

The supreme importance of prophylaxis lies in the echo of the aphorism, "He is likewise a preserver of health if he knows the things that derange health and cause disease, and how to remove them from persons in health"^[4]

Homoeopathy as Immunity Booster

There are a number of ways to boost a person's level of immunity to specified infectious diseases. One way is by raising general health through good diet and nutrition, through a balanced lifestyle, and through constitutional homoeopathic treatment or herbal treatment to improve the overall vitality of the person. The second way to boost a person's level of disease-specific immunity by two ways: one is vaccination, and the second is the use of homoeopathically selected and prepared substances, a procedure known as *homoeoprophylaxis* [HP].

In homoeopathy there is no immunisation but there are remedies that can build up immunity to infections as well as act as curative where a disease has developed. These remedies carry no risk of detrimental effects, they are absolutely safe.^[15] If medicines can protect us from the contagion of a raging epidemic, they must possess a greater power to alter our vital force than the epidemic.^[4]

No disease will arise without an existing predisposition to that disease.^[15] Susceptibility in organism, mental or bodily, is equivalent to the state involving attitude towards internal causes and to external

circumstances. In health we live and act and resist without knowing it but in disease we live but suffer.^[5] It is the absence of the predisposition to any particular disease that makes us immune to it. Homoeopathy alone is capable of removing these predispositions.^[15]

Immunity can be assured to patients if we will closely observe the symptomatology and select the remedy in the early stages of each epidemic, by administering the remedy as a prophylactic.^[5]

The hahnemannian outlook of preventing an epidemic disease is twofold. One is to collect subjective and objective symptoms of few cases of epidemic in an area to find the genus epidemicus both for prevention and treatment. This type of approach satisfies long term immunity in the organism. The second approach is to give a remedy which was effective in previous epidemic which best suits when genus epidemicus is not worked out.^[16]

Case Taking in Epidemic diseases

Whether or not an epidemic is new or unusual makes no difference since in any case the physician must presume the true picture of every epidemic to be new and unknown and must thoroughly examine it in all its details. This is because every epidemic is in many ways unique and is found to be very different from all previous ones.

From writing down the symptoms of several cases, the outline of the disease picture becomes more and more complete. The symptoms like loss of appetite, sleeplessness etc. and those that are more exceptional and unusual constitute the characteristic picture of the epidemic. The totality of its symptoms cannot be perceived in any one patient, but can be gathered only from the sufferings of several patients with different physical constitutions. The totality of symptoms common to all the patients reveals the one specific homoeopathic remedy to the epidemic which always helps patients who were fairly healthy before the epidemic.^[5]

All the symptoms have to be arranged in a schematic form, like the mind symptoms of the different patients under mind and the head symptoms under head, and so on as if one man had expressed all the symptoms, and in this way the particular disease in schematic form will be represented. By the aid of a repertory the symptom totality will lead to a group of remedies for the particular epidemic and the Materia Medica can reach to one remedy which seems to be best suited to the general nature of the sickness.^[17] The selection of a remedy ought not to be grounded only on subjective symptoms, but rather on the characteristic nucleus of the symptomatic picture that was mandatorily expressed in the pathological effects experimentally verified in human beings and animals.^[18]

For prophylaxis there is required a less degree of similitude than is necessary for curing. A remedy will not have to be so similar to prevent disease as to cure it so we must look to homoeopathy for protection as well as for cure.^[17]

The genius epidemicus

The concept of genius epidemicus originated with Hippocrates and was taken up again by Paracelsus (1493-1541) who pointed out to the need to find the *specific* remedy for each epidemic. He wrote, "If you cannot find the specific remedy for every epidemic, all your endeavor to cure is in vain."

Hahnemann described the concept clearly in his writings without using the expression genius epidemicus. However, Aegidi related a conversation he had with Hahnemann when he was visiting him in 1831, in which Hahnemann used the term genius epidemicus. Underlying the practical concept of the genius epidemicus is the working hypothesis that *the same cause must be followed by like effect*. Hahnemann described the same process in paragraph 101, 241 and 73 in the Organon, but still without using the term genius epidemicus.

The genius epidemicus is in apparent conflict within the homeopathic methodology of strict individualization,

which is the fundamental key to success in homeopathy, but in epidemics we can try to individualize the collective disease rather than every single case affected by the epidemic disease. The selection of the remedy must be from *the totality of the epidemic symptoms*, and not from one individual epidemic case.

It is not always easy to find one remedy for an entire epidemic and especially during a pandemic. The genius epidemicus tends to change from climatic area to another, from the seashore to the mountains. The genius epidemicus may be different for the different stages of an epidemic in the same locality.^[19]

Homoeoprophylaxis (HP) and its Historical evidences

HP is the use of potentised substances in a systematic manner to prevent the development of the characteristic symptoms of infectious diseases. It was first described in 1801. It is comparably effective to vaccination and also completely nontoxic and therefore safe.

A substance that is capable of producing in many healthy persons a group of symptoms similar to the characteristic symptoms of an infectious disease, is capable of preventing those characteristic symptoms in most previously unprotected persons. Hahnemann's proving of *Cinchona* is a prophylactic for malaria, Nosodes are further examples of this application of the Law of Similars. Similarly, a substance that is capable of removing the characteristic symptoms of an infectious disease in many infected patients is capable of preventing similar symptoms in most previously unprotected persons.^[15] Hahnemann's use of *Belladonna* to both treat and prevent scarlet fever^[20], *Lathyrus Sativus* used in the polio epidemics to treat polio^[21], can also be used for polio prevention are few examples.

Three methods of HP have been described^[15]:

The first method is the use of the constitutional remedy which strengthens the vital force by removing predispositions,

increasing vitality and raising general immunity to stress and diseases.

The second method is the use of the genus epidemicus that is especially useful in offering protection against acute epidemic diseases.

The third method is the use of the nosode. In this method a nosode of the targeted disease is given as a preventive to that disease.

Homoeopathic medicine during epidemic/pandemic can be prescribed during the following different phases^[16]:

Preventive stage: As disease is not manifested in the individual, it strengthens the inbuilt host resistance to prevent the epidemic disease.

Prodromal stage: If genus epidemicus is given to an individual in incubative or prodromal stage, there will be insignificant or minimal manifestations of disease in the individual.

Disease stage: When an epidemic disease is manifested in an individual, the same genus epidemicus treats him because the remedy covers both his subjective as well as objective symptoms.

Disease stage with complications: In case the manifestation of disease is severe with complications, thorough individualization of the case including the significant symptoms of past and family history is *sine qua non*.

Dr Pierre Schmidt said, ‘The most noble role of medicine is unquestionably prophylaxis. There homoeopathy asserts its superiority over the existing methods. It can prevent disease without endangering the organism, without incurring the disappointments of the prevailing school of medicine’.^[22]

The historical evidences of HP in preventing epidemics/pandemics has been provided in the Table 1.^[23-59]

Table 1. Historical evidences of homeoprophylaxis in preventing Epidemics/Pandemics

Name of Physician	Year	Epidemic	Evidences
Hahnemann	1801	Scarlet fever	Hahnemann suggested <i>Belladonna</i> can be used to prevent Scarlet fever. ^[20]
-	1801	Scarlet fever	Ten doctors used <i>Belladonna</i> as a preventive on 1,646 children, with only 123 cases of the disease arising, an effectiveness of 92.5%. ^[23]
Dr Grimmer	1800s	Poliomyelitis	He treated 5,000 young children with a homeoprophylactic. None developed polio. ^[24]
Boenninghausen	1800s	Smallpox	Excellent success in using <i>Thuja occidentalis</i> in the prophylactic treatment of Smallpox. ^[25]
Hufeland	1838	Scarlet fever	The Prussian Government ordered the use of the prophylactic during all scarlet fever epidemics. ^[26]
Dr Charge	1841-1854	Cholera	He after producing a statistical table showing the difference in cholera mortality between homeopathic and allopathic treatment at the Convent Refuge at Marseilles, stated that once homeopathy was introduced prophylactically, no further cases were reported. ^[27]
Boenninghausen	1849	Cholera	He treated and prevented “untold” numbers of cholera infections with a mortality rate of 5-16% while a death rate of 54-90% occurred with conventional treatment. ^[28]
Eaton	Early 1900	Smallpox	During the Smallpox epidemic in the USA, 2806 persons were given <i>Variolinum 30c</i> , out of which 547 were exposed to the disease and only 14 developed smallpox. This resulted in 97.5% effectiveness of the homeopathic prophylactic. ^[29]
Dr Chavanon	1932	Diphtheria	Laboratory experiments showed that 45 children became Schick test negative after being treated homeoprophylactically. ^[30]
Dr Patterson and Boyd	1941	Diphtheria	23 out of 33 children became Schick test negative after being given the prophylactic. ^[31]
Dr Roux	1947	Diphtheria	He repeated the Schick test and produced a great results. ^[32]
Taylor-Smith	1950	Poliomyelitis	He investigated the use of the genus epidemicus <i>Lathyrus Sativus</i> in the prevention of poliomyelitis with 100% results. ^[21]
Dr Eisfelder	1956-58	Poliomyelitis	He immunized over 6,000 children with a homeoprophylactic. No cases of polio and no side effects were reported. ^[33]
Francisco Eizayaga	1957	Poliomyelitis	A severe poliomyelitis epidemic occurred in Buenos Aires when a known homeoprophylactic was distributed as a preventative. None of them registered a case of contagion. ^[34]
Gutman	1963	Influenza	Effectiveness of <i>Influenzinum triple Nosode</i> by 21 homoeopathic physicians in three countries revealed a composite effectiveness of 86%. ^[35]
Dr Dorothy Shepherd	1967	Whooping cough	Several accounts of whooping cough prophylaxis by a nosode are provided. ^[36]
-	1968-70	Flu	During a survey in Indian factories and offices 20% of the patients treated by conventional medical physicians contracted the flu. Among the homeopathically treated patients, only 6.5% came down with the disease and recovered more rapidly than allopathically treated patients. ^[37]
Castro & Nogueira	1974	Meningitis	In August, there was an epidemic of meningitis in Brazil where <i>Meningococcinum 10c</i> was given as prophylactic with effectiveness of 95.7%. ^[38]

Francisco Eizayaga	1975	Poliomyelitis	During a poliomyelitis epidemic in Buenos Aires, 40,000 were given a known homeoprophylactic. None developed poliomyelitis. ^[34]
Fox	1987	Whooping cough	Effectiveness of <i>Pertussin</i> 30c showed a range of effectiveness from 95% based on confirmed cases of whooping cough. ^[39]
English	1987	Whooping cough	Pilot study of <i>Pertussin</i> 30c examined responses concerning 694 children who were given the remedy every three months during the first year of life, then at 18, 24, 36, 48 and 60 months of age. Effectiveness ranged between 87.0% and 91.5%. ^[40]
D P Rastogi	1989-1993	Japanese encephalitis	During the epidemic in eastern parts of Uttar Pradesh (U.P.) in 1989, 1991 and 1993, <i>Belladonna</i> 200c single dose was distributed as preventive to 3,22,812 persons in 96 villages in three districts of U.P. In a follow up of 39,250 persons, none of them reported any signs and symptoms of JE. ^[41]
Dr Eizayaga	1991	Hepatitis	When treating individuals with hepatitis, he would also give their family members and school-mates the prophylactic. None contracted hepatitis in spite of being in close contact. ^[34]
CCRH	1996	Dengue haemorrhagic fever.	A homeoprophylactic was administered to at least 39,200 people in the Delhi area. The follow-up of 23,520 people, 10 days later, revealed that only 5 people (0.125%) had developed mild symptoms, with the rest showing no signs or symptoms. ^[42]
Mroninski	1998	Meningitis	Remedy <i>Meningococcinum</i> was given in 30c potency to 65,826 people from 0 to 20 years of age in Blumenau, Brazil. Another 23,539 people in the area did not receive the remedy. The rate of protection found in the group using HP was 95% at six months and 91% at 12 months. ^[43]
-	1999-2003	Japanese Encephalitis	Government of Andhra Pradesh adopted <i>Belladonna-Calcareia carbonica-Tuberculinum bovinum</i> (BCT) regimen as preventive and the response was encouraging. The death rate was nil in the BCT distributed areas. ^[44]
Marino	2001	Dengue	In Brazil, a single dose of the homeopathic remedy <i>Eupat perf</i> 30c was given to 40% of residents of the most highly affected neighbourhood. Thereafter, dengue incidence decreased by 81.5%, as compared with neighbourhoods that did not receive homeopathic prophylaxis. ^[45]
Partington, T.	2003-2005	Malaria	A malaria trial was conducted in Kenya using a homeoprophylactic with a group of 33 volunteers. Twenty-one of the volunteers had experienced 1-3 malaria episodes in the 18 months prior to the trial. All the participants in the trial remained malaria free. ^[46]
Dr Golden	2004		From his 15 yr study, he was able to determine that the unimmunised had an attack rate of 85% while the homeopathically protected group had an attack rate of 11.7%, producing a figure of efficacy of 86.2%. ^[47]
-	2009	Dengue	In a contained population in Havana, around 20,000 residents were given homeoprophylactic whose efficacy was between 74.1 and 100%. Apart from a fall in Dengue cases to zero immediately following the intervention, there was a clear decline in the general incidence of febrile symptoms. ^[48]
-	2007-2010	Dengue	The Homoeopathic prophylactic was freely distributed by the Health Department of Macaé in the years: 2007: 216,000 doses; 2008: 203,878 doses; 2009: 211,059 doses; 2010: 178 677 doses. Lethality among notified dengue cases was 0.2% in 2007, 0.0% in 2008, 0.1% in 2009 and 0.2% in 2010. ^[49]
J Nair	2007	Chikungunya	Homoeopathic medicine <i>Bryonia</i> 30c was distributed as a preventive to 19,750 people in Kerala and it was found to be better than placebo in decreasing the incidence of Chikungunya. ^[50]
L. Nunes	2007	Dengue	A campaign was carried in Brazil where distribution of 1560,00 doses of homoeopathic complex containing <i>Phosp 30c</i> , <i>Crot hor 30c</i> and <i>Eup perf 30c</i> was done resulting in 93% reduction in incidence whereas rest of the state showed increase of 128%. ^[51]
B. Gustavo	2007	Leptospirosis	In Cuba, in high-risk regions with a population of 2.4 million persons, 2.1 millions received one or two doses of homeoprophylaxis and the incidence of Leptospirosis was significantly diminished by 84% in the group. The intervention was "strongly associated with a drastic reduction of disease incidence resulting in complete control of the epidemic." The protective effect continued into 2008 with an 84% reduction in leptospirosis cases for the treated areas though no further prophylactic had been given. Leptospirosis infections in untreated areas increased by 22%. ^[52]
-	2008	Malaria	At Kendu Bay, Kenya, where malaria is endemic, 34 clients participated in a homeoprophylaxis observational field study. In the 6 months prior to the study, all participants had experienced malaria-like symptoms at least once a month or every two weeks. Over the course of the study and use of the prophylactic only 12% (4 out of the 34 respondents) experienced an attack of malaria or malaria-like symptoms. ^[53]
Lyrio C	2011	Flu	Nosodes or placebo was given for 30 days to 450 children in Brazil to test their effectiveness in preventing flu and acute respiratory infections. Over the next 12 months the incidence of diagnosed acute respiratory infection or flu was 3 times higher in the placebo group than those given the prophylactics. The researchers commented that the low cost of treatment and the absence of adverse effects made these nosodes a useful Public Health Service. ^[54]
-	2011-2013	Malaria	In 2011, homoeopathic prophylactic was distributed to 9 areas within Chhattisgarh. Those in unprotected areas were 5 times more likely to contract the disease. On the strength of these results the program was expanded to 20 areas in 2012 and 40 areas in 2013. ^[55]
-	2012	Whooping cough	In an Irish trial involving 112 children (aged 1-2 months), those given homeoprophylactics for childhood diseases including whooping cough were less likely to experience severe symptoms of the diseases if contracted than the vaccinated comparison group. ^[56]
S. Gadugu	2014	Japanese encephalitis	After introduction of homeoprophylaxis in Japanese encephalitis in Andhra Pradesh, the incidence of the disease decreased dramatically. ^[57]

-	2014	Dengue	The Sing Buri province of Thailand reported the lowest incidence of dengue fever of all provinces following the distribution of a homeoprophylactic by the Thai government. ^[58]
B. Kawan	2017	Cholera	After the terrible earthquake in Nepal, homeopathic remedies <i>Merc.</i> , <i>Aars.</i> , <i>Cham.</i> , <i>Acon.</i> has been used by a Red Cross team in a camp of about 50,000 earthquake victims, with an advantage in the prevention of Cholera. ^[59]

A long-term HP program designed to offer parents a choice between vaccination and HP in three diseases showed the efficacy rates of 86.2% in Pertussis, 90.0% in Measles, 91.6% in Mumps.^[60]

HP appears from the literature to offer a level of protection around 90%, and appears to be an extremely safe method of prevention against infectious diseases, with a reaction rate of less than 2% per dose and no evidence of long-term adverse health consequences.^[15]

Historical evidences of Homoeopathic treatment in Epidemics/Pandemics

The homeopathic literature is very rich in reports on the results obtained in the homeopathic treatment during times of epidemics which consistently reveal an extremely low mortality rate regardless of

the physician, the time, the place or the type of epidemic disease.^[19] Homoeopathy made its reputation in the 19th century with outstanding success in preventing devastating epidemic infectious disease that were known to have very high mortality rates such as cholera, typhoid, Spanish influenza, yellow fever, scarlet fever, diphtheria etc.

A record of success story of 50 homoeopathic physicians from different places during the influenza epidemic who treated homeopathically with mortality rate of 0-4% as compared to 30-60% with conventional treatment proves the supreme efficacy of homoeopathy in such times of epidemics.^[61]

The detailed historical evidences of Homoeopathic treatment during numerous epidemics are given in Table 2.^[62- 64]

Table 2. Historical evidences of Homoeopathic Treatment in Epidemics/Pandemics

Name of the Physician	Year	Epidemic/Pandemic	Evidences
Hahnemann	1813	Typhus	At the time when Typhus was considered incurable, a success rate of 100% in treating 183 Typhus patients. ^[62]
Hahnemann	1831	Asiatic cholera	The use of <i>Camphor</i> , <i>Cuprum met</i> and <i>Verat alb</i> can prevent as well as cure cholera. ^[63] Homeopathy decreased the death rate from an average of about 50% down to 1-2% . ^[19]
Dr. J. Bakody	1831	Cholera	In Hungary, 223 cases were treated and only 8 died. People addressed a petition to the allopathic physicians demanding Homoeopathy. ^[64]
Dr. Karl	-	Typhus	Dr. Karl, Boenninghausen's son, was successful in treating a severe epidemic of typhus in Westphalia. ^[64]
Dr. George Henry Bute	-	Asiatic cholera	He met with great success in Philadelphia, where the Asiatic cholera had broken out in a virulent form. ^[64]
Dr. Anton Fischer	1831	Cholera	He achieved results in cholera which astonished the opponents of Homoeopathy. ^[64]
Dr. Adolphus Gerstel	1831	Asiatic Cholera	He treated 300 cases of cholera in different villages, at Prague with extremely fortunate results and only showed 32 deaths. ^[64]
Dr. Herrmann	1827	Dysentery	During an epidemic of dysentery achieved brilliant results with Homoeopathic treatment. ^[64]
Dr. Georg August Heinrich Muhlenbein	-	Scarlatina	He received from the Royal Prussian Academy of Sciences the great silver medal of merit in the treatment of epidemic of very malignant form of Scarlatina. ^[64]
Dr. François Perrussel	1849-1857	Cholera, Diphtheria	When cholera first appeared in France, he won a bronze medal at Marseilles. With an official commission from the government, in 1849, at Nantes and in 1854 in Champagne, received for his devotion a gold medal. He also attended at Anjou, in 1857, a terrible epidemic of diphtheria. ^[64]
Dr. Joseph Hippolyte Pulte	-	Diphtheria	He embodied his experiences, reflections and successful treatment during diphtheria epidemic in a monograph which had an extensive circulation in the West. ^[64]
Dr. Frederick Hervey Foster Quin	1831	Cholera	Dr. Quin did with signal success during cholera in Moravia. London Homoeopathic Hospital was converted into a cholera hospital, and the remarkable results obtained were refused for publication in the Blue Book which afterwards, at the instance of Parliament, incorporated in a separate Blue Book. ^[64]
Dr. Gustavus Reichelm	-	Measles, Whooping cough, Scarlet Fever	Dr. Reichelm, the " Dutch Doctor", during twelve years under his medical administration of measles, whooping cough and scarlet fever, reported only two deaths. ^[64]
Dr. Joseph Roth	-	Cholera	He published a voluminous report which established great superiority of homoeopathic

			method against the epidemic of cholera. ^[64]
-	1849	Cholera	In a well-documented epidemic of cholera in Cincinnati in 1849, two homeopathic physicians treated 2,646 cases with 35 deaths, a mortality rate of 1.3%, while, allopathy lost, one half of their cases. ^[19]
Adolph Lippe	1849	Malignant Scarlet fever	In Pennsylvania, Lippe treated over 150 cases without a single death, while under conventional medicine was over 90 percent. ^[64]
Dr. Rocco Rubini	1854-1865	Cholera	He used <i>Camphor</i> in the epidemics of cholera in 1854, 1855 and 1865, and out of 448 cases, every case was cured. Out of 255 cases treated by others in the same manner in Naples and Abruzzi provinces, only two deaths were recorded. Records are documented in a book entitled "Statistics of Cholera Patients Cured Solely by the Use of <i>Camphor</i> in 1854-55 and 65." ^[64]
Dr. Gustav Adolph Schreter	-	Cholera	He proved the efficacy of Homoeopathy during the destructive epidemic of cholera which withstood the allopathic treatment. ^[64]
Dr. Carl Friedrich Christoph Schwarze	-	Cholera	He treated the severest cases of cholera no matter how hopeless the condition. ^[64]
Dr. Seider	1832	Cholera	He treated at Wiszni Wolotschok 202 cholera patients. Of these, he treated in the allopathic manner 93, of whom 69 died. He treated homoeopathically 109 cases, and of these only 23 died. ^[64]
Dr. Seuber	1831	Cholera	In the cholera epidemic of 1831, he treated 209 cases. Of these 93 refused to be treated homoeopathically and were given allopathic treatment- 69 died, 116 were treated homoeopathically, and only 23 died. ^[64]
Dr. Swoff	1831	Cholera	He treated at Saratov 939 cases with loss of only 78. ^[64]
Dr. Tschewinzky	1831	Cholera	In Schitzmir, a highly favorable report of homoeopathic treatment in cholera to the Minister of the Interior caused an order to the medical authority of Wolkynia to use that method in future epidemics, in consequence of which, in 1837, he treated 400 patients of whom only twelve died. ^[64]
Pastor J. M. Veith	1831-32	Cholera	He was especially successful with homoeopathic remedies. ^[64]
Dr. G. A. Weber	-	Measles	He was physician to the Prince of Solms-Lich in Darmstadt. During an attack of a very malignant epidemic of measles, he treated 100 children by the homoeopathic method without losing one. ^[64]
-	1860	Malignant Diphtheria	Three homeopathic physicians in Philadelphia reported having treated 300 cases of malignant diphtheria without a single death while the mortality under conventional medicine was over 50%. ^[19]
-	1918-1920	Spanish flu	An estimated 50-100 million deaths worldwide, mortality rate from the combined effects of Influenza and Pneumonia under conventional medical care was 5.8% while under homeopathy was 0.7%. ^[19]
-	1918-1920	Spanish flu	Mortality from the combined effects of Influenza and Pneumonia in pregnant women under conventional medical care was 30% whereas with homeopathic care it was only 0.7%. ^[19]
-	1918-1919	Spanish flu	The death rates for patients treated with homeopathy was 1 to 2% compared with 30 to 60% mortality for those treated by conventional physicians. ^[11]

Current 2019-nCoV Pandemic

CoV are a large family of viruses that cause illness ranging from common cold to more severe diseases such as MERS-CoV and SARS-CoV. The new Corona virus disease (COVID-19) was first reported from Wuhan, China, on 31 December 2019 and has spread rapidly across 217 countries infecting 55,56,679 people and causing death of 3,51,866 people over the globe as on 28 May, 2020. Common signs of infection include fever, cough, myalgia, fatigue and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. The function of the immune system is critical in the human response to infectious disease. Viral infections induce oxidative stress and cause damage to airway epithelial

cells. A growing body of evidence identifies stress, nutrition and immunity as a cofactor in infectious disease susceptibility and outcomes. The mainstay in management of CoV infections has been supportive care, nutrition and preventing further progression.^[65,66] In the absence of a vaccine, social distancing has emerged as the most widely adopted strategy for its mitigation and control.^[67] One of the key issues for controlling this pandemic is to set up a suitable quarantine period which could capture about 95% of the cases developing symptoms so that the practice of isolations will be more effective and save public health resources.^[68]

Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Government of India (GOI) has also taken steps to

undertake research proposals from all streams of Ayush to generate scientific evidence on COVID-19.^[69] Ministry of Health and Family Welfare, GOI also launched the 'AYUSH Sanjivani' application to generate data on acceptance and usage of AYUSH advocacies.^[70] Indian Council of Medical Research (ICMR)-National Institute of Virology (NIV) at Pune has developed and validated the indigenous IgG Enzyme Linked Immunosorbent Assay (ELISA) test "COVID KAVACH ELISA" for antibody detection for COVID-19. While real time Reverse Transcription-Polymerase Chain Reaction (RT-PCR) is the frontline test for clinical diagnosis of the CoV, robust antibody tests are critical for surveillance to understand the proportion of population exposed to infection.^[71]

Prevention of spread of 2019-nCoV

The GOI is taking every possible measures for preventing the spread of COVID-19 pandemic such as social distancing, putting effective restrictions on air, train and road travel, screening and testing of travellers, isolation and quarantine, school closures etc. A key goal of such policies is to decrease the encounters between infected individuals and susceptible individuals and decelerate the rate of transmission.

WHO recommends to maintain a 3-foot (1m) distance away from a person showing symptoms of disease^[72] whereas the CDC recommend a 6-foot (2m) separation.^[73]

Although such social distancing strategies are critical in the current time of pandemic, it may seem surprising that the current understanding of the routes of host-to-host transmission in respiratory infectious diseases were even described by Hahnemann in his saying that "The only means, on which we can rely for checking epidemics in their birth, is the separation of the diseased from the healthy". Hahnemann gave accurate safety instructions regarding maintaining the distance for those who visit sick-beds for the first time, "that they should be in the commencement rather see their

patients more frequently, but each time stay beside them as short a time as possible, keep as far away as possible from the bed and especially that they should take care that the sick room be thoroughly aired before their visit."

He recommended, "Should the medical man experience in himself some commencing signs of the disease, he should immediately leave off visiting the patient. In such cases I have taken a drachm of cinchona bark in wine every three quarters of an hour, until all danger of infection (whatever kind of epidemic fever the disease might be) was completely over".^[3]

Management of 2019-nCoV

Medicines like Hydroxychloroquine, Bacillus Calmette Guerin (BCG) Vaccines, Human Immunodeficiency Virus (HIV) drugs etc are being tested for prevention and treatment of COVID-19. Some of these are highly toxic on patients already suffering with multiple disease conditions and it has been cautioned that it should not be used without medical supervision.

One systematic review and meta-analysis has shown that antipyretic treatment increases the risk of mortality in animal models of influenza infection.^[74] Also aggressively treating fever in critically ill patients may lead to a higher mortality rate.^[75] It has also been demonstrated that antipyretic treatment aggravated the hematogenous spread of the influenza virus to the central nervous system in chicks.^[74] An increased risk of mortality in animals was reported in studies of aspirin, paracetamol and diclofenac.^[76]

Homoeopathy in 2019-nCoV

A major treatment paradigm that evolved centuries ago is presently the second largest healthcare fraternity of the world – Homeopathy.^[1] Homoeopathic medicine ideally has to do with the cure of disease, the building up of the individual, not overlooking the proper hygiene and sanitation, but with a deeper view of the needs of the individual himself, rather than the needs of the community.^[3]

Most of the evidences of homoeopathic treatment during epidemics happened much before the emergence of the current bio medicine, modern epidemiology and contemporary vaccines. While individualization is the gold standard, it is impractical to use on a widespread basis during epidemics. Combination remedies can be effective but must be based on the symptoms of a given epidemic in a specific location. Treatment with genus epidemicus can also be successful if based on data from many practitioners. Finally, isopathy shows promise and might be more readily accepted by mainstream medicine due to its similarity to vaccination. Whether using individualization, combination remedies, genus epidemicus, or isopathy, we have several good studies documenting positive results with homeopathy.^[1]

Incidentally, during the 2014 Ebola epidemic the WHO concluded, "It is ethical to offer unproven interventions with as yet unknown efficacy and adverse effects, as potential treatment or prevention".^[77]

The Health advisory given by Ministry of AYUSH, GOI against corona virus infection included Homoeopathic medicine *Ars alb* 30c as a possible preventive^[65] which followed the preventive distribution of the homeopathic medicine in various states in India.^[78-82] Earlier Scientific Advisory Board of Central Council for Research in Homoeopathy (CCRH) had also considered *Ars alb* to be advised for prevention of Influenza Like Illness (ILI) on the basis of evidence from studies.^[83-85] *Ars alb* as one of the constituents in a formulation has been shown to affect HT29 cells and human macrophages. Also, it showed ↓NF-κB hyperactivity (reduced expression of reporter gene GFP in transfect HT29 cells), ↓TNF-α release in macrophages.^[86]

In China, doctors constituted two sets of homeopathic symptom pictures of COVID-19 indicating *Bry alba* and *Gels*. They gave *Gels* 30c as a preventive medicine to 4-5% of the population in one area and in another area out of 6,00,000

people 50% got *Gels*. In both the areas no sick people were recorded. They also treated several mild or medium ill COVID-19 patients with *Gels*, *Bry alba*, *Eup per* in succession. They started to recover on first day and within 3 days they were healthy. The American Institute of Homeopathy database reveals *Bry alba* and *Ars alb* make up about 50% of the successful prescriptions.^[19]

In the Italian study on a group of 50 symptomatic Corona positive patients, the prescribed medications in order of frequency were *Bry alba* (21 times), *Ars alb* (16 times), *Phos flavus* (9 times), *Atr bell* (6 times), *Antim tart* (6 times). The hospitalization rate of this group treated homeopathically for 2019-nCoV was zero. No adverse events were observed during homeopathic treatments.^[87]

Dr. Rajan Sankaran advised to give *Camphora* 1M twice daily for 2 days as a prophylactic, *Camphora* 1M 6 hourly to people who have got the infection and *Camphora* 10 M 6 hourly for those with severe lung complications.^[88]

The international homeopathic medical society, Liga Medicorum Homoeopathica Internationalis (LMHI), representing homeopathic physicians in more than 70 countries all over the world also analyzed 132 Covid-19 cases and 76 (57.5%) of them responded well to three medicines namely *Ars alb*, *Bry* and *Gels*.^[89]

Research in Epidemic diseases

CCRH through its network of 26 Institutes/Units all over India has been conducting medical relief camps in communicable diseases since its inception such as conjunctivitis, dengue, Japanese Encephalitis (JE), bacillary dysentery, yellow fever, jaundice, typhoid, measles, meningitis, cholera, viral fevers, kala azar, plague, malaria, swine flu and chikungunya. Homoeopathic medicines were distributed for various disease conditions as mentioned above as per the genus epidemicus for preventive purpose.^[44] CCRH had so far undertaken clinical trials in Dengue, Acute

Encephalitis syndrome(AES)/JE, Chikungunya and ILI.

In 2012, a double blind placebo-controlled randomized trial was conducted on dengue patients using a homoeopathic complex (*Phos 30c, Crot hor 30c* and *Eup perf 30c*), where the intervention group showed improvement in most symptoms including headache, fever and Myalgia.^[90] In Dengue Hemorrhagic fever, add on Homoeopathy could bring early improvement in platelet count and decrease in hospital stay by 2 days.^[91]

A study with combination of six homoeopathic remedies and placebo in patients with symptoms of dengue fever in Honduras was done with no differences in the resolution of pain and fever between both the groups. It may be due to the fact that the composition of the combination remedy did not accurately match the symptoms of the patients treated.^[92] In Pakistan, homoeopathic complex of 10 medicines in dengue fever showed better results as opposed to standard maintenance therapy.^[93] In Cuba, 25,000 patients who tested positive for dengue were treated with homoeopathic complex (*Bry alba, Eup per, Gels* and *dengue nosode*). As a result, no severe symptoms were reported nor patients required intensive care. The stay at hospital was also reduced from 7-10 days to 3-5 days.^[94]

In a study undertaken by CCRH on JE showed that homeopathy as an adjuvant to the Institutional Management Protocol (IMP) decrease death rate by 15% in comparison to those who received only IMP.^[95] It has also conducted preclinical studies in collaboration with School of Tropical Medicine, Kolkata in both *in vitro* and *in vivo* models where it was found that Homoeopathic medicine Belladonna could inhibit JE virus infection in both the models significantly.^[96,97] Another exploratory observational study in JE was undertaken in In-Patient Department (IPD) setting (epidemic ward) of Baba Raghav Das (BRD) Medical College and Nehru Hospital, Uttar Pradesh with successful

reduction in mortality and morbidity rate.^[98] Further, CCRH has undertaken a study in collaboration with Center for Cellular and molecular Biology, Hyderabad to understand the action of *Bell, Calc carb, Tuberculinum* (BCT) medicines on JE.^[44]

The ILI study revealed the significant effect of individualized homoeopathic treatment in the verum group as compared to placebo group. It was observed that the complications/sequel rate was significantly less in the treatment group as compared to the placebo group.^[99] A few clinical trials in ILI with homoeopathic intervention were conducted in the past with a positive result.^[100,101] A controlled clinical trial was conducted to assess the effectiveness of a homoeopathic preparation in the treatment of influenza-like syndromes. The proportion of cases who recovered within 48 h of treatment was greater among the active drug group than among the placebo group.^[102] A study revealed the antiviral efficacies of homoeopathic medicines to treat Influenza viruses which cause exceptionally infectious intense respiratory illnesses with significant mortality, particularly among small kids, old individuals, and people with comorbid ailments.^[103] One study showed that Influenzinum has a significant role in the counteraction and treatment of the flu and Oscilloccinum in the alleviation of the adverse pathologic effects brought about by this ailment.^[104] Also Oscilloccinum is more effective than placebo in the prevention and / or treatment of influenza and influenza-like illness in adults or children.^[105]

CCRH conducted a multicenter study during 1980-2003 to assess role of homoeopathy in Clinical filariasis with recurrent adenolymphangitis and lymphoedema using various indicated medicines with encouraging results. Further, a comparative single blind, placebo controlled study carried out during 1986-1988, observed an improvement of 40.54% in the group treated with *Rhus tox, Apis mel* or *Rhododendron*, depending on their

symptomatic presentation. Another observational study was carried out during the period April 1985-March 1989, which found *Rhus tox* to be the most effective medicine. The overall improvement with homeopathic medicines was 70.7%.^[44] In another single blind follow-up study in an endemic village in Odisha, homeopathic treatment could effectively reduce the frequency of filarial fevers by 20 per cent among amicrofilaraemic cases, with a higher reduction in cases with genital involvement (36%) and mastitis (57%).^[106] Further, a study undertaken to show usefulness of homeopathic therapy in preventing development of irreversible lymphedema concluded that treatment in early stage helped in restricting the further advancement of the disease and improved in quality of life of the patients. The medicines found effective were *Rhus tox*, followed by *Sulphur*, *Bry alba*, *Nat mur*, *Apis mel*, *Puls nig* and *Thuja*.^[107]

CCRH has undertaken initiatives to prevent and treat malarial cases in endemic and/or epidemic regions. Preclinical studies on *in vitro* and *in vivo* models on 'Evaluation of antimalarial efficacy of some homeopathic drugs against malaria' will also be initiated. Further, a proposal has been drafted for conducting a preventive trial on 'Prevention and effectiveness of homeopathic medicine on malaria – an interventional cluster study' in Odisha covering a spectrum of 12,000 people.^[44]

Researchers evaluated the efficacy of two homeoprophylactics in combination therapy against lethal murine malaria in mice. The combination of remedies showed significant preventive activity with chemosuppression that was higher than the standard drug, pyrimethamine. It also showed a moderate curative activity with complete clearance of parasites in 50% of surviving mice. These findings point to the significant antiplasmodial efficacy of the combination of these homeopathic drugs against *Plasmodium berghei*.^[108] Many homeopathic drugs have been scientifically tested on in-vitro/in-vivo models in recent

studies with promising results, with significant antiplasmodial efficacy against various species of plasmodium parasite.^[109,110] Also a group of predefined homeopathic medicines were studied in the management of malaria.^[111] A combination remedy for *Plasmodium berghei* in mice demonstrated considerable *in vivo* antimalarial activity and enhanced mean survival time. The study establishes the effectiveness of the combination remedy against *P. berghei* *in vivo* along with the safety of the drugs to the liver and kidney functions of the host.^[112]

In a different type of experiment, 142 laboratory mice were challenged with a potentially fatal dose of *Francisella tularensis*, a rapidly lethal organism. Potencies of 30c, 200c or 1M of the nosode were given prophylactically to healthy mice three times a week for 4 weeks before and 4 weeks after the dose of lethal organism. Age-matched animals were treated during the same time with 70% ethanol as controls. All those treated with the nosode, except receiving the 1M, had statistically significant decreased mortality and increased mean times to death. The results reported a 22% effectiveness of HP compared to a control group. However the major flaw was twelve doses which may have caused a "proving" effect in the mice something that could have lowered the susceptibility of the mice prior to challenge.^[113]

Gripp-Heel, a proprietary combination remedy also demonstrated significant *in vitro* reductions of infectivity by 20% to 40% when tested against many viruses.^[114] An *in-vitro* study examined and showed the antiviral activity of *Euphorbium compositum* SN (*Euphorbium resinifera* and *Pulsatilla pratensis*) against Influenza A virus, Respiratory Syncytial Virus (RSV), Human Rhinovirus (HRV) and Herpes Simplex Virus type 1 (HSV-1).^[115] The *in vitro* effects of the homeopathic combination Engystol against DNA infection Adeno 5 and HSV-1, RSV and HRV were observed. A 73% decrease of

Adeno 5 specific proteins and an 80% decrease in HSV-1 explicit proteins were seen in ELISAs of infected cells treated with Engystol after disease. Plaque-reduction assays with the RNA viruses, RSV and HRV, demonstrated decreases in infectivity by 37% (RSV) and 20% (HRV), individually.^[116] A study suggests that Engystol and Gripp-Heel inhibited the replication of a variety of respiratory viruses by stimulating type-1 Interferon release in different cell systems.^[117]

Keeping in view the clinical success in above mentioned severe diseases, Homoeopathy as an adjuvant to the usual care may be used in 2019-nCoV patients.

CONCLUSION

There will always be epidemics and humanity will always be susceptible to them. Every epidemic is unique and because the test of a system of medicine is not in what it promises but in what it performs, homeopathy is always ready to face such uniqueness, regardless of its newest or severity.

All flu-like illnesses can evolve into pneumonia, which becomes by far the main cause of mortality from these illnesses, as close to 98% of persons dying from these flu-like illnesses is from pneumonia.^[19] The current epidemic is also a flu-like illness that severely affects the older and immunocompromised segments of our population. The historical evidences in this review clearly shows that homeopathy discloses a very consistent and strong prophylactic, therapeutic and long-term effectiveness, while at the same time safe and cost-effective, and should therefore play a major role in epidemics for prevention as well as cure.

Harvey Farrington, one of the pillars of the American school of homeopathy said on this point, "The fact that the homeopath takes cognizance of symptoms per se, whether indicative of any known disease or not, enables him to correct the condition before definite disease results; and still more important, he is able to combat new diseases

that have never been heard before. Influenza, or the epidemic later called 'flu' which created such havoc among the soldiers in the United States camps and in the army overseas, was treated symptomatically with surprising success by the homeopathic physicians, while others were absolutely impotent because they did not know what caused the infection nor did anyone understand the pathology".^[19]

Prejudice or ignorance are not valid reasons to rule out homeopathic prophylaxis as an adjuvant tool in the fight against epidemics but rejection implies in dismissing logic, evidence and scientificity. The way in which the belief of people changes after the presentation of empirical evidence depends on their prior beliefs and on the quality of the evidence.^[118] People who did not believe in homoeopathy will still not be convinced after reading the evidence presented here. People who are equivocal will have a more optimistic view, while people who already believed in the efficacy of homoeopathy will be almost sure about the results homoeopathy has shown. Also much stress needs to be laid upon the generation of the scientific evidences by the clinical trials in such epidemics.

It is the time to open the door to homeopathy, as morbidity and mortality could be dramatically lessened by the simple application of homeopathy in the current epidemic and can greatly speed up the recovery time without leaving patients weakened by the treatment. Homoeopathy shall rise up to the challenge of the current corona virus pandemic and renew and establish faith based on some scientific evidences.

Conflict of interest: None

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