

Bowel Nosodes of Homoeopathy in Colorectal Cancer & Autoimmune, Metabolic, Neuro-Psychiatric Disorders

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Abstract

Review Article

The age old problems of cholera, typhoid & diarrheal diseases center around gut problems & along with that typhoid continues to bother human race through its recurrence & chronic nature as it affects the peyer's patches of the gut or the enteron. This article brings out the relation between a healthy gut & conditions like Atopy, Colorectal Cancer (CC) & Auto-immune, Metabolic & Neuro- Psychiatric Disorders. These disorders occur due to gut microbial dysbiosis in the humans. Here, Atopy manifests through skin & respiratory issues, Metabolic manifests through Obesity & Type 2 diabetes, Auto-immune manifests through Irritable Bowel Disease/Irritable Bowel Syndrome (IBD/IBS), Rheumatoid Arthritis (RA), Celiac Disease (CD) & Neuro-Psychiatric manifests through Autism Spectrum Disorder (ASD) [6- 29]. Human gastrointestinal tract hosts a complex ecosystem of approximately 300-500 bacterial species. All these encompass nearly 2 million genes & this is known as micro- biome. The number of bacteria within the human gut is roughly 10 times more than that of all the cells in the human body. The cumulative bacterial genomic content is immensely greater than the human genome [4- 30]. A generalized approach to Auto-immune Disorders (AD), Metabolic Disorders (MD), Neuro Psychiatric Disorders (NPD), Atopy & Colorectal Cancer (CC) has failed & modern medicine has already realized that new avenues to restore personalized interventions to restore microbial balance and improve overall health & that too all the related disorders as well [4- 29]. It is here that the article delves into Homoeopathy as it is a personalized system of medicine. Further, it has a range of medicines called 'Bowel Nosodes' that are prepared from the bacteria of the gut. Here 'Bowel' means the gut and 'Nosodes' means medicines prepared from disease products or organisms. As the set of medicines are prepared from the bacteria of the gut, these are called 'Bowel Nosodes' [14, 15]. The article sees through the role of these set of bowel nosodes in the above-mentioned disorders & its role in medical pluralism in the current scenario. The article suggests a treatment protocol for AD through the bowel nosodes mainly along with other Homoeopathic medicines. As Homoeopathy fits into the criteria of being therapeutically effective, no side effects & being cost effective as well, it meets the criteria of Essential Medicines as per the National List of Essential Medicines of Government of India [5- 14].

Keywords: Bowel Nosode, Gut Micro-Biota Dysbiosis, Homoeopathy, Miasms.

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INTRODUCTION

The reader will get an idea of the application of healthy gut in a scientific laboratory as the medicines prepared the gut bacteria 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 like disorders related to gut microbial dysbiosis through medicines that fulfill the triad criteria of essential medicines as per the National List of Essential Medicines (NLEM) [5- 7].

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 gut bacteria lens, homoeopathic medicines fall into the category of small doses that stimulate the body [23].

Gut feeling is a stage which all of us go through in our life experiences. The same gut has an aspect not in the brain through the gut brain axis but also in a myriad of diseases mentioned above including the Auto-immune Disorders (AD). Previously, the causes of these diseases were attributable to genetic factors or vulnerabilities but currently environmental factors are also an attribution. These environmental factors can be external or internal & the current article

deals with the internal factors of the body. Among the internal factors, qualitative & quantitative altered gut micro-biota has been in the lime light & the current article deals with the role of healthy gut to fight against gut microbial dysbiosis related diseases [4- 6].

As mentioned above, the current article deals with the internal environment of the body, it is prudent to discuss the Bio Psycho Social model as it elaborates on the environmental factors in health & diseases. Through gut feeling, the healthy gut also impacts the psychological aspect. The role of environment in wellness and diseases has been explained by George Engel in 1977 through the Bio Psycho Social model. He suggested that to understand a person's medical condition it is not simply the biological factors to consider, but also the psychological and social factors [1, 2]. The brief elaboration of the three terms is given below.

Bio (physiological pathology) **Psycho** (thoughts emotions and behaviors such as psychological distress, fear/avoidance beliefs, current coping methods and attribution)

Social (socio-economical, socio-environmental, and cultural factors such as work issues, family circumstances and benefits/economics)

This model is commonly used in chronic pain, with the view that the pain is a psycho-physiological behavior pattern that cannot be categorized into biological, psychological, or social factors alone. There are suggestions that physiotherapy should integrate psychological treatment to address all components comprising the experience of chronic pain [3]. The figure below depicts the details of the model [1].

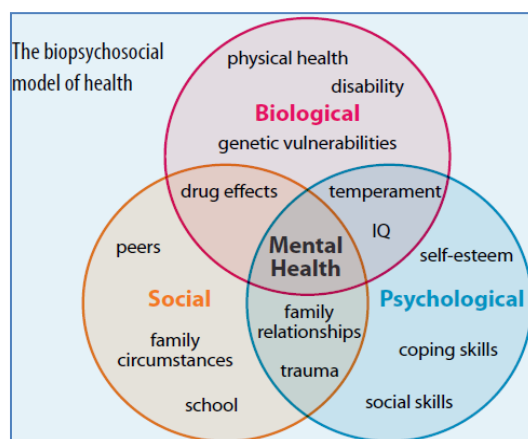


Figure 1

About The Bowel Nosodes

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 theorized was that ‘the bacterium is a concomitant of the pathology and not the cause’ [11- 14].

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’ [11- 14].

Life starts with interfacing a nosode through a 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 [8- 21].

Details of Bowel Nosodes

As mentioned above, Dr. Paterson presented the detailed list 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: Detailed list of the Bowel Nosodes [11- 15]

Serial Number	Name of the non-lactose fermenting organism	Name of the homoeopathic medicine prepared from the organism	Biochemistry of the homoeopathic medicine	Name of the constitutional Homoeopathic Medicine that is in relation with the Bowel Nosode
1.	Proteus Morganii and Enterobacteriaceae Morganella Morganni	Morgan (Bach) & Morgan Pure (Paterson) from P. Morganii & Morgan Gartner (Paterson) from Morganella Morgagnii	Sulphur and Carbon are the two outstanding elements	Sulphur
2.	Proteus Vulgaris and Proteus Mirabilis	Proteus (Bach)	Chlorine is the outstanding element	Natrium Mur
3.	Bacillus Asiaticus, Bacillus Cloacae and Bacillus Freundii	Bacillus Number 7 – it is named as such since it was the 7 th non lactose fermenting type of bacillus as observed in the laboratory	Outstanding elements are Bromine and Iodine in combination with Potassium	Iodium, Kalium Carb
4.	Salmonella Enteritidis	Bacillus Gartner (Bach)	Outstanding elements are Silicea, Phosphorus and Fluorine	Phosphorus, Silicea
5.	Shigella Dysenteriae	Dysentery Compound (Bach)	NA	Arsenic Album
6.	B.Coli- intermediary form	Mutabile (Bach)	NA	Pulsatilla
7.	Streptococcus Faecalis	Sycotic Compound (Paterson)	NA	Thuja
8.	Enterococcus Faecalis	Faecalis (Bach)	NA	Sepia
9.	Bacillus Asiaticus, Bacillus Cloacae and Bacillus Freundii	Bacillus Number 10 (Paterson) – it is named as such since it was the 10 th non lactose fermenting type of bacillus as observed in the laboratory	NA	Calc Carb- as it is prescribed for patients who can not digest eggs, fat, Lipoma, warts on hands & Leucorrhoea that smells like fish. As bacillus Number 7 is related to thyroid gland, fat metabolism comes in the domain of the nosode.
10.	Pyogenic Bacteria or Bacteria causing Septic State	CocalCo (Paterson)	NA	Pyrogen- Since this is prepared from infected & putrid meat
11.	Escherichia Coli/Bacillus Coli	Colibacillinum	NA	Medorrhinum- since this is a antisycotic that prevents Urinary Tract Infections (UTI) & E.Coli is a leading cause of UTI

Thus, using the biochemistry background, prescriptions can also be made in homoeopathy 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 as in the cases curated at the beauty parlors. However, as per the above mentioned table, every bowel nosode does not have the biochemical analysis as some of their minor bowel nosodes & are not well proved. Bacillus number 7 & 10, Mutabile (Bach) & Faecalis Bach & Cocal Co are minor bowel nosodes & the others are major as these are well proved drugs in Homoeopathy [11- 15].

Further, it is essential to mention the process of naming the bowel nosodes. Morgan (Bach) is so named because it was isolated by Dr. E. Bach from Enterobacteriaceae Morganella Morganii. Morgan Pure (Paterson) is so named because it was renamed 'Pure' by Paterson to differentiate from Gartner. It was developed as a sub group of Bach's original Morgan Compound. Proteus (Bach) is named after the shape shifting of sea god of Greek mythology whose stench was said to be rank. Shape shifting is related to 'Hysteria'. 'Sycotic Compound' is so named because Dr. Paterson used this drug to treat a case of Gonorrhoea of US Ground Infantry's (GI) stationed in Britain during World War II (WW). As per the concept of Homoeopathy, since 'Sycotic' miasm infests in the Urinary Tract Infections (UTI) & in 1943 during WW II, Gonorrhoea bacteria's infection was known as 'Specific Urethritis', The isolated bacterium was morphologically similar to the Gonococcus bacteria also Dr. Paterson named this nosodes as 'Sycotic Compound' [6- 25].

In this paragraph, the broad therapeutic uses of the bowel nosodes are mentioned as per the Homoeopathic system of medicine. Morgan (Bach) is associated with the Psoric miasm that causes only disturbances in the physiology & do not cause pathological disturbances. 'Morgan Pure' is associated with 'Congestion' & Morgan Gartner is associated with 'Irritability'. 'Proteus Bach' is associated with 'Brain Storm' & is commonly known as the 'Angry Adrenalin'. Bacillus number 7 (seven) is associated with 'Fatigue'. 'Gartner Compound (Bach)' is associated with 'Nutrition'. 'Dysentery Compound' is associated with 'Apprehension' & is commonly known as the 'Heart Nosode'. 'Sycotic Compound' is associated with 'Irritability' [6- 16]. With this therapeutic background, now let us get back to the relation between the Gut & the diseases related to the

gut microbial dysbiosis related diseases, the prime focus of the current article.

Gut & Autoimmune Disorders

Research based evidence suggests that disturbed gut microbiota contribute to pathogenesis of AD such as Rheumatoid Arthritis (RA), Irritable Bowel Syndrome (IBS) & Celiac Disease (CD). Studies show that patients with RA exhibit suppressed gut microbial diversity, which correlates with autoantibody levels & disease duration. Dysbiosis has also been observed to precede the development of arthritis [4- 26].

Patients with RA have an increased abundance of Prevotella species that includes Prevotella Copri & Collinsella. Collinsella Aerofaciens has been linked to increased gut permeability & expression of IL-17A which is a cytokine involved in pathogenesis of RA. Hence, Collinsella can be a biomarker for identifying arthritogenic bacteria in the human gut. On the other hand, beneficial bacteria like Faecalibacterium are decreased in RA cases. [4- 26].

In the pathogenesis of IBS, microbial dysbiosis in the gut also has an active role. Studies have revealed that there are distinct differences in the gut microbiota among patients of IBS & healthy individuals. IBS is characterized by increased Firmicutes, including bacteria capable of forming resistant endospores. There is also marked reduction of beneficial microbes like Bifidobacterium in all sub types of IBS. Reduction is also seen for Faecalibacterium species in IBS cases [4- 27].

Gut & Other Disorders

Gut microbial dysbiosis may lead to dysfunction of host machineries, there by contributing pathogenesis & progression towards a broad spectrum of diseases. These are Celiac Disease (CD) which is a Multi Systemic Autoimmune Disorders (MSAD). The other disorders are Clostridium Difficile Infection (CDI), Metabolic Disorders like Type 2 Diabetes & Obesity, Atopic disorders like skin problems & respiratory problems. The other issues like Colorectal Cancer (CC) & Neuro Psychiatric Disorder like Autism Spectrum Disorder (ASD) [27- 29].

Homoeopathic system of medicine has medicines in the form of bowel nosodes for each of the above-mentioned disorder. This will be discussed in detail in later sections [11- 16].

Colorectal Cancer & Gut Immunity

As mentioned above, dysbiosis in the gut micro-biota can also lead to Colorectal Cancer. This has been proved in a clinical trial in 2022. In a very small trial done by doctors at Newyork's memorial Sloan

Kettering Cancer Center, United States in 2022, the patients were given a drug called ‘Dostarlimab’ for a period of 6 months. The trial resulted in every single one of their colorectal cancer tumours disappearing. The trial group just included 18 people [34].

The researchers proved the hypothesis in the trial that ‘Colorectal Cancer Tumours disappeared in patients who had Healthy Gut Microbiome’. This means a healthy gut or a lower F/B ratio could fight the cancer better and helped patients to survive survive [4- 34].

Assessment of Gut Microbiomes

Firmicutes to bacteriodes ratio or commonly called as F/B ratio is usually used to assess gut microbiome balance. A lower ratio is preferred as higher ratio indicates microbial imbalance. Harmful bacteria like Escherichia, Shigella, Campylobacter & salmonella are significantly elevated in IBS cases. Typical IBS symptoms like abdominal pain, bloating & diarrhea are due to the by-products produced by these bacteria [4- 27].

Dietary Factors

Gut micro-biota are integral to host digestion & nutrition & they can generate nutrients from substrates that are otherwise indigestible by the host [30]. The following section is based upon this statement that has to be achieved through dietary modifications & life style changes. Dietary changes should include Fermentable Oligosaccharides, Disaccharides, Monosaccharides & Polyols (FODMAP) derived from fast food. Foods that promote production of short chain fatty acids such as dietary fibers & resistant starch are recommended to create a gut environment that suppresses above-mentioned disorders related to gut dysbiosis [4].

A predominantly unprocessed vegetarian diet can help prevent flare-ups of gut dysbiosis related diseases. Complemented with dietary changes, regular exercise, good sleep & stress reduction can prevent the gut dysbiosis related disorders [4].

Dosage of Bowel Nosodes

It is significant to note that all the Bowel Nosodes are available in 30CH potencies. Here, CH stands for Centesimal Hahneman as Dr. Samuel Hahneman introduced the potency in Homoeopathy. Further, with the changing times in this era of medical pluralism, the dosage suggested earlier by Dr. Paterson does not apply in current times. The lead author suggests that the medicines should be given ‘one dose per day for a month’. The ‘Anti Psorics’ should be given in the morning, the ‘Anti Sycotics’ are to be given either in the morning or late evening. Similarly, the ‘Anti Syphilitics’ are to be given either in the morning or evening.

The Homoeopathic practitioner can also prescribe more than one ‘Bowel Nosode’ at one time. The practitioner can also prescribe the related constitutional medicine for each of the prescribed nosode. Since the purview of the article is only on Bowel Nosodes, the lead author does not mention the related medicines in the current article. [11,14,15]

Way Forward

Novel therapies like Faecal Micro-Biota Transplantation (FMBT), Probiotic foods & Prebiotic foods are in the stay currently. The Bowel Nosodes of Homoeopathy are also a type of Novel Therapy (NT) [28]. People who had low gut immunity suffered from COVID 19 & the mortality were high among themselves. Prebiotics like Bananas & Probiotics like curd, buttermilk & coconut water should be a part of the daily diet to have an optimum immunity of the gut. Prebiotics help the body to produce healthy gut bacteria & the Probiotics are the healthy gut bacteria itself [35].

Along with this, variety of cereals, variety of pulses, variety of Green Vegetables (GV), variety of Green Leafy Vegetables (GLV), all kinds of fruits should be part of the regular diet. A regular habit over the years will help the body to improve gut immunity. All these kinds of habits help the body to get rid of toxins through healthy bowels. Physically & mentally being active is also a critical key to have an optimum gut immunity [33].

Traditional Indian food habit is the best antidote as it is a tried and tested balanced diet. Gut dysbiosis patients should consume a balanced, healthy and calorie restricted that should be within 1500 calories per 24 hours. Adding a brisk walk of 30-40 minutes per 24 hours is another proven and effective way to reverse the above-mentioned disorders [4- 7].

The traditional Indian diet addresses to reduce the basic inertia of the body that is known as ‘Tamasic’ quality as per Ayurveda. Alcohol, fat rich, oily, non vegetarian and spicy foods are clubbed under the ‘Tamasic’ diet. Next quality to be addressed is ‘Rajasic’ or ‘king’s diet’ in English. This is the diet that induces half of all inertia in the body. The carbohydrate, non vegetarian and protein rich diet falls in this category. The third and the least inertia inducing diet in the body is ‘Sattvic’ or the balanced and vegetarian diet that includes dairy products, fruits, green vegetables and green leafy vegetables. Hence, in a month, the habit should be to eat the ‘Rajasic’ diet once a week or 4 times a month, the ‘Tamasic’ once a fortnight or twice a month and the rest 24 days should be for ‘Sattvic’. These habits are the front line care for the gut micro-biota dysbiosis patients [33].

These three types of foods influence the miasmatic conditions in the body there by preventing the body to be prone to gut dysbiosis diseases. Regular consumption of 'Tamasic' diet will aggravate the syphilitic condition while regular intake of 'Rajasic' diet will aggravate the sycotic miasm and finally regular consumption of 'Sattvic' foods will aggravate the psoric miasm in the body. The body needs variety of macro and micro nutrients that will only come through a judicious mixture of these three diets [33].

The precipitating factors are the 'fast food' urban culture that leads to high consumption of junk food that is high in calories. Adding to that is the deviation from traditional food practices. These risk factors are best avoided so that a lower ratio of F/B will be achieved & this ratio is mentioned above [4].

Homoeopathic Approach

As already mentioned above, all Homoeopathic medicine has physical and mental symptoms as the drugs are proved on human beings. Given below are Homoeopathic medicines that 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 article's treatment protocol is primarily based on the Boericke's Materia Medica's section on Bowel Nosodes. The treatment plans for the dysbiosis of gut microbiota disorders mentioned above are given below. [8- 14].

The issues like gut dysbiosis can be resolved through the Universal Health Coverage (UHC) where the AYUSH systems like homoeopathy can play an active role. 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 [31].

Homoeopathic Treatment Protocol Based on Bowel Nosodes

These are gut related cases which were on medications for long obviously and subsequently these cases became resistant to treatment post the chronic nature of diseases. Each homoeopath should remember that exercise and diet are the main stay of the treatment. A prescription of exercise of 45 minutes of brisk walking per day, the Indian diet as mentioned in the prognosis and care section are a must along with the homoeopathic medicines [11]. The treatment plan is on the lines of the physiology, pathology and biochemistry of gut micro-biota dysbiosis patients as mentioned above.

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 gut related patient has physiological issues only, anti Psorics Bowel Nosodes are to be prescribed. 'Morgan (Bach)' is an anti Psoric Bowel Nosode. Similarly, if there are extra growths like tumors & warts, anti Sycotics Bowel Nosodes are to be prescribed. 'Bacillus Number 10' is an anti Sycotic Bowel Nosode. Finally, if there is destruction or tissue loss in the body, anti Syphilitics Bowel Nosodes are to be prescribed. 'Colibacillinum' is an anti syphilitic Bowel Nosode. [11- 16].

Detailed Therapeutics

The very first category is IBS or IBD. The following Bowel Nosodes can be prescribed for both these conditions. 'Bacillus Number 10'- if the patient complains of anorexia. 'Dysentery Compound'- if the patient has symptoms of gastric & duodenal ulcer. 'Bacillus Gartner (Bach) '- associated with gastroenteritis, pancreatic diseases & malnutrition. 'Bacillus Morgan (Bach) '- associated with Gall Bladder issues. 'Bacillus Morgan Gaertner (Paterson) '- associated with gall stones & a right sided remedy. 'Sycotic Compound' - associated with hepatitis. 'Colibacillinum' - associated with gall stones & appendicitis [12- 14]. The second category is RA. The following Bowel Nosodes can be prescribed for this condition. 'Bacillus Number 7 (Paterson) '- Lumbago & Rheumatism. 'Bacillus Gartner (Bach) '- Rheumatism. 'Bacillus Morgan (Bach) '- arthritis. 'Bacillus Morgan Gaertner (Paterson) '- polyarthritis. 'Sycotic Compound' - polyarthritis, rheumatism. 'Colibacillinum' - rheumatism [12- 14].

The third category is Celiac disease. The following Bowel Nosodes can be prescribed for this condition. 'Bacillus Gaertner (Bach) '- celiac disease. 'Colibacillinum' - chronic intestinal diseases [12- 14]. The fourth category is colorectal cancer. The related Bowel Nosodes that can be prescribed are given below. 'Bacillus Gaertner (Bach) '- precancerous state. 'Sycotic Compound' - Irritability of the mucus & synovial membranes of the colon & rectum. 'Colibacillinum' - chronic intestinal diseases [12- 14].

The next category is ASD which is a Neuro Psychiatric Disorder. The related Bowel Nosodes are given below. 'Dysentery Compound' - nervous tension. 'Morgan Bach' - congestion. 'Bacillus Proteus' - associated with central & nervous system. 'Colibacillinum' - has action on brain as it covers encephalitis [12- 14]. The next category is Atopy that shows with dermatitis & respiratory issues. The related Bowel Nosodes are given below. 'Bacillus Number 10' - asthma & dermatitis. 'Dysentery Compound' - eczema & urticaria. 'Morgan (Bach) - acne rosacea,

broncho-pneumonia & bronchitis. 'Morgan Gaertner (Paterson)- psoriasis, eczema, alopecia. 'Sycotic Compound'- herpes zoster, asthma, acne rosacea [12-14]. The next category is Type 2 Diabetes & the related Bowel Nosodes are given below. 'Bacillus Gaertner (Bach)'- pancreatic disease, malnutrition.'Bacillus Morgan Gaertner (Paterson)- liver diseases. 'Sycotic Compound'- hepatitis. 'Colibacillinum'- has action on gall bladder [12- 14].

The last category is Obesity. The related Bowel Nosodes are given below. 'Bacillus Number 7'- if the case is related to hypothyroidism. 'Bacillus Number 10'- is an anti sycotic. 'Morgan (Bach)- is also anti sycotic. 'Sycotic Compound'- is anti sycotic [12-14]. With this treatment protocol having been discussed, the next section deals with the current status of gut diseases in India through epidemiological studies & large scale surveys.

Current Status of Gut Micro-Biota Dysbiosis in India

As mentioned above, the first category of disease is the auto-immune disorders that includes rheumatoid arthritis, celiac disease, irritable bowel disease/syndrome, colorectal cancer, autism spectrum disorder as neuro-psychiatric disorder, obesity & type 2 diabetes as metabolic disorders & atopy as a immune system disorder manifesting primarily on the skin & associated with respiratory issues [28- 29]. The current prevalence of IBS in the Indian community varies from 0.4% to 4.2%. 10% of population in India use Homoeopathy currently. Hence, 0.42% can be saved from IBS in India considering the total affected population by IBS is 4.2% of population [32- 37]. The current prevalence of RA in India is 0.75%. It is quite similar to that reported from developed countries. Hence, using the analogy of 10% of population using Homoeopathy currently, 0.075% of population can be saved from RA & if it is integrated into the entire population, predisposition to RA can be reduced to a great extent. It has been mentioned above that gut micro-biota dysbiosis results in predisposition to RA. [4-38]. The current prevalence of Celiac disease in the north Indian community is 1 in 96. Celiac disease is more common than is recognized in India. If Homoeopathy is integrated, the prevalence can be 0.9 in 96 [32- 39].

According to a report by ET health world, about 18 million people in India are diagnosed with autism. About 1 to 1.5% of children aged 2-9 years are

diagnosed with Autism Spectrum Disorder (ASD). In the same manner of Homoeopathic integration as mentioned above, 0.15% of children can be saved from ASD [32- 40]. As per the International Study of Asthma & Allergies in Childhood (ISAAC), prevalence of Atopic dermatitis in India is 2.7% in the 6-7 year age group & 3.6% in the 13-14 year age group. It is lower compared to the global estimates. Here again, 0.27% in 6-7 year group & 0.36% in the 13-14 year age group can be saved from Atopy provided they are introduced to Homoeopathic treatment [32- 41].

In India, the Annual Incidence Rates (AAR) for colon cancer & rectal cancer in men are 4.4 & 4.1 per 100,000 respectively. The AAR for colon cancer in women is 3.9 per 100,000. Here again, with the introduction of Homoeopathy, incidences of 0.44 for colon cancer & 0.41 for rectal cancer can be reduced in men. For women, incidence of 0.39 can be reduced for colon cancer [32- 42]. According to ICMR-INDIAB study in 2015, prevalence rate of obesity & central obesity varies from 11.8% to 31.3% & 16.9% to 36.3% respectively. With the above-mentioned analogy of Homoeopathic integration, for obesity 0.118 to 0.313% & for central obesity 0.169 to 0.363% can be saved or reduced [32- 43].

India has the second largest number of diabetics worldwide. According to an estimate, over 74 million Indians were diagnosed with diabetes in 2021 & this is expected to rise to over 124 million by 2045. Type 2 diabetes accounts for over 90% of all diabetic cases in India. Similarly, 7.4 million can be saved from diabetes in India if Homoeopathy is integrated to these diabetic segment of population [32- 44].

Overweight, Obesity, Diabetes, Stunting in India Prior to NFHS 5

There were 46 million U5 children who were stunted as in the year 2016. There were 72 million diabetics as in 2017 & 166 million who were both overweight & obese as in 2018. Here, again 46 million children had very poor F/B ratio, 238 million had high F/B ratio as they were obese, overweight & diabetic as well. [4- 47].

Diarrhea, Obesity, Diabetes in India as Per NFHS

As mentioned above the gut micro-biota dysbiosis leads to the above-mentioned three health status or diseases. The indicators related to these three conditions are given in the National Family Health Survey is given in the following table [18].

Table 2: Indicators of Gut Micro-Biota Dysbiosis related disorders given in NFHS 4 & 5[18]

Gut Micro-Biota related disorder	Indicator in percentages	Target Group	NFHS 5 (Urban)	NFHS 5 (Rural)	NFHS 5 (Total)	NFHS 4 (Total)
Diarrhoea	Prevalence of diarrhoea in the 2 weeks preceding the survey	Under 5 year group	6.2	7.7	7.3	9.2
Overweight	Children who are overweight(Weight-for-Height)	Under 5 year group	4.2	3.2	3.4	2.1
Poor Nutritional Status	Body Mass Index is below normal(BMI <18.5 kg/m ²)	Women aged 15-49 years	13.2	21.2	18.7	22.9
Poor Nutritional Status	Overweight or obese (BMI ≥25kg/m ²)	Women aged 15-49 years	33.2	19.7	24.0	20.6
Poor Nutritional Status	High risk Waist-to-Hip Ratio ≥ 0.85	Women aged 15-49 years	59.9	55.2	56.7	NA
Poor Nutritional Status	Body Mass Index is below normal(BMI <18.5 kg/m ²)	Men aged 15-49 years	13.0	17.8	16.2	20.2
Poor Nutritional Status	Overweight or obese (BMI ≥25kg/m ²)	Men aged 15-49 years	29.8	19.3	22.9	18.9
Poor Nutritional Status	High risk Waist-to-Hip Ratio(≥ 0.90)	Men aged 15-49 years	50.1	46.4	47.7	NA

All the above-mentioned indicators show the manifestations of the poor gut. Here, F/B ratio or the Firmicutes-to- Bacteriodes ratio is very low in men or women who have low BMI. Similarly, F/B ratio is very high in overweight children & adults having high BMI. Similarly, the F/B ratio is very low in U5 children who are prone to diarrhea. The Clostridium Difficile infection which is also due to a poor gut microbiota also occurs in children who are prone to diarrhea [4- 28].

CONCLUSION

As all drugs in homoeopathy have a group of mental symptoms, Homoeopathy is and will be effective against the mentioned disorders in general. The current article adds another feather in the Homoeopathic cap as it can deal with the probable upcoming of large number of cases of gut disorders in view of high stress levels due to the ongoing & lasting effects of COVID 19 crisis. However, it should be also seen that along with constitutional/deep acting/polychrest homoeopathic medicines, specific bowel nosodes as 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 [8- 36]. In fact, the detailed case taking of a case & empathetic hearing are the elements of supportive therapy as the mentioned 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 gut health & diets of vegetarians lack these nutrients. The primary sources of these two supplements are sea food & non-vegetarian foods [8- 33]. 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 in the form of bowel nosodes as seen in the contents of the sections mentioned above [5- 7].

Declaration of the Lead Author

Prof. Shankar Das was the Ph.D. guide of the lead author at Tata Institute of Social Sciences, Mumbai during 2011- 18. Prof. D.P. Singh was the teacher of the lead author at Tata Institute of Social Sciences, Mumbai during 1995-97. 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.

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