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Table of Contents

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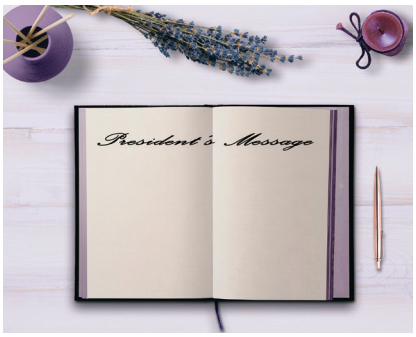
To Our Members



Dear Colleagues,

I hope that you and your loved ones are safe and healthy. We are living with more uncertainty than usual in these times of COVID-19 pandemic. As of today, May 31st, 2020, according to the CDC website, there are 1,717,077 people in the US alone who have tested positive for COVID-19 and more than a 100,000 who have died.

When you read this message, even more up-to-date information will be available.

Our profession needs to respond to this in effective and concrete ways. I would like to emphasize AIH's commitment to furthering the advancement of Homeopathy through education to you, my colleagues, to other health care professionals, and to the public at large.

First of all, we are offering free webinars delivered by Dr. Andre Saine. For many years, Dr. Saine has been an exceptionally able practitioner, teacher, and researcher. He delivered two outstanding AIH webinars on the current state of Homeopathic treatment for people with COVID-19 throughout the North American continent, Europe, and other parts of the world. Included in these webinars are case reports, as well as practical guidelines for choosing remedies in the outpatient setting in patients who are COVID-19 positive or suspected as COVID-19 positive. I have found Dr. Saine's recommendations very helpful in my care of patients. Both of these highly regarded webinars are available for free on the AIH website, homeopathyusa.org, and I encourage you to view them and share with colleagues and friends.

AIH has also been a world leader in setting up a data collection project for practitioners in treating patients with COVID-19 or suspected COVID-19. This project was originally designed and set up on March 22nd, and has been collaborating with international organizations and colleagues. It has collected many case reports from the US and from around the world with data about successful homeopathic treatment. The data has been distilled to provide the most useful indications for the successful application homeopathic remedies. It also gives instructions about how to enter your own case reports to add to the expanding data base of homeopathic Covid-19 knowledge. This is also available on the AIH website. I wish to tender special thanks to Peter Gold and Ron LaRock for their efforts in creating and maintaining this data collection project.

Perhaps you were also wondering about the current situation between the Americans For Homeopathy Choice (AFHC) and the FDA. AFHC has recently submitted a new Citizens Petition which includes a draft of recommended guidelines for the FDA as to how to regulate Homeopathic medicines. Dr. Ron Whitmont and I were closely involved in crafting these proposed guidelines; we are cautiously optimistic that the FDA will give them due consideration. For more information and details, I refer you to the AFHC website.

On October 30th, 2020, AIH will be holding its annual three-day conference. This year, the conference will be especially unique and gratifying. We will feature a completely online video conference of Professor George Vithoulkas and the top professional instructors of the International Academy of Classical Homeopathy (IACH) based on the Greek island of Alonissos. This will allow practitioners from all over the world to participate. I am very excited about this educational opportunity and hope you will participate. Some of the important conference topics will include:

- Core Concepts of Homeopathy as propounded by Professor George Vithoulkas and the IACH
- Cured Case reports utilizing the concepts of the "Continuum Theory" of Professor George Vithoulkas
- Clinical Research Overview of the concepts of the "Continuum Theory" of Professor George Vithoulkas

I am grateful for your commitment to reduce and prevent human suffering through the practice of Homeopathy. I wish you all good health and deep satisfaction,

Ron Dushkin, MD
President, American Institute of Homeopathy

Editorial: Treating Corona Virus Patients

"If circumstances lead me,
I will find Where truth is hid,
Though it were hid indeed
Within the centre."[1]

Dear Reader,

Welcome to the Summer 2020 edition of the journal!

This issue as expected will focus on the topic of epidemic, infectious disease. The health of the world—as well as its economic, political and social milieu—is now, of course, in the grip of this COVID-19 pandemic, but this therapeutic challenge has proven itself no match for the skill of the experienced homeopathic practitioner. (Just like the Spanish flu of 1918 was no match for skillful homeopathic treatment of the time.)[2] (Also please examine our AIH White Paper on Homeopathy and Epidemics.[3]) The New York City Health Commissioner, and future Senator, Royal S. Copeland, MD, was a homeopathic physician and surgeon who played a crucial role in managing the city's response to the 1918 Flu epidemic. In this issue, we will also explore the current understanding of the pathophysiological, as well as the symptomatic, basis of our "diagnosis" of a set of remedies for this disease. There is still much to learn both from the homeopathic and orthodox medical perspectives. We will come to understand Hahnemann's methodology in epidemics and the "specific" remedy. Of course, there will be excellent cases typical of the symptomatology of COVID-19 though, unfortunately and as is the case in many of those affected, specific testing was not performed.

In our search for a more complete therapeutic understanding of this pandemic, it is crucial to hone to near perfection our case-taking skills, *not to skip steps that may reveal the most important characteristic features of the disease*, as well as to become expert in materia medica descriptions of some common (and uncommon) remedies for this disease, which is both similar and different from the symptom complexes commonly found in influenza and pneumonia.

Adding to our therapeutic accuracy, in the article by Dr. Rutten, we are presented with a clinically-based statistical methodology which can and will be helpful as well, and that is currently being applied by LMHI to its collection of cases. Furthermore, there are ongoing data collection projects (AIH, LMHI, *et al*.) in the US and abroad which will soon provide us with greater insight into both the totality of the characteristic symptoms of this disease and the comprehensive group of remedies needed for effective treatment.

I would be very much honored if the collective wisdom of our readers were to be gathered together here in the form of articles sent to this journal.

As always, I look forward to your comments, and suggestions!

Warm regards,
Alex Bekker, MD, ABIHM, FAIS
Editor in Chief, AJHM
First Vice President, AIH

1. Shakespeare, William. *Hamlet* (1600-02), Act II, scene 2, line 157.
2. "Dean W. A. Pearson of Philadelphia collected 26,795 cases of influenza treated by homeopathic physicians with a mortality of 1.05%, while the average old school mortality is 30%." Dewey, W.A., MD. "Homeopathy in Influenza— A Chorus of Fifty in Harmony." *Journal of the American Institute of Homeopathy*. V. 13. 1920-1921. P. 1038.
3. https://homeopathyusa.org/uploads/American_Institute_of_Homeopathy_paper_on_%20epidemics.pdf

Homeopathic PuZZle?

Which remedy seems to be particularly common in COVID-19 treatment in the US and around the world which, having a characteristic thirst, stitching pains, dryness of mucous membranes, and amelioration from pressure and lying on the affected side?

(See page 39 for answer.)

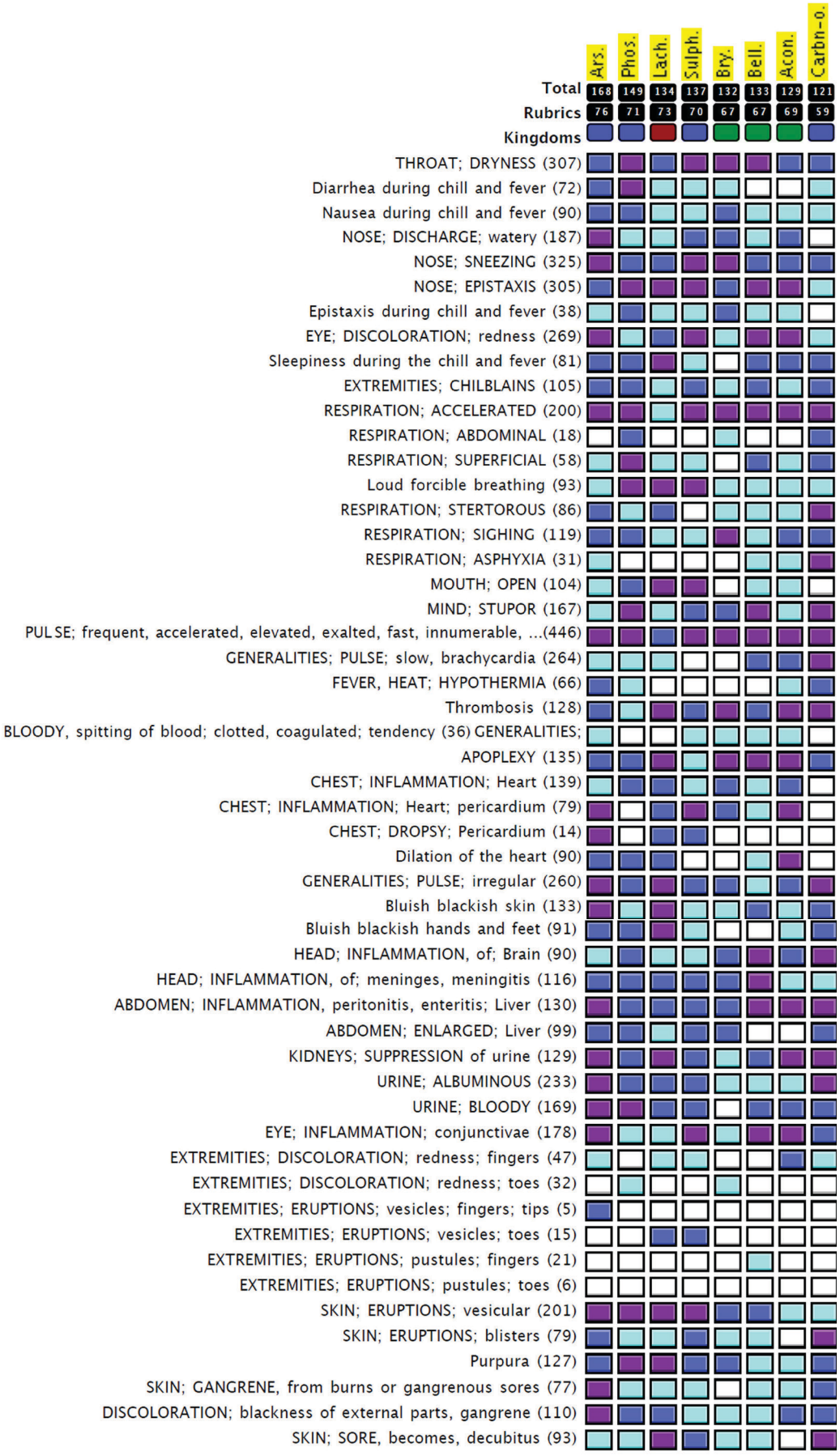
The news from CDC and other regular sources is constantly changing and can be examined by the reader independently; in juxtaposition, we will present our "facts on the ground."

There is only one item here that is our building block: COVID-19 totality of symptoms of disease based on homeopathically treated cases and regular journal clinical feature reports; the repertorisation of that totality follows (taken from a presentation by Dr. André Saine, Case Management of the COVID-19 Patient with Genuine Homeopathy—An update.05/02/20. https://www.homeopathy.ca/homeopathy.ca/). After repertorization of the totality of symptoms, the most common remedies seen are:

1. *Arsenicum album* (168/76)
2. *Phosphorus* (149/71)
3. *Lachesis* (134/73)
4. *Sulphur* (137/70)
5. *Bryonia alba* (132/67)
6. *Belladonna* (133/67)
7. *Aconitum* (129/69)
8. *Carboneum oxygenisatum* (121/59

Repertorization of the Totality of Covid-19 Symptoms

	Ars.	Phos.	Lach.	Sulph.	Bry.	Bell.	Acon.	Carbn-o.
Total	168	149	134	137	132	133	129	121
Rubrics	76	71	73	70	67	67	69	59
Kingdoms								
COUGH; SHORT (168)								
COUGH; DRY (352)								
THROAT; PAIN; General (352)								
FEVER, HEAT; REMITTENT (68)								
FEVER, HEAT; INTENSE heat, 39–40 Celsius (99)								
Weakness during chill and fever (108)								
WEAKNESS, enervation, exhaustion, prostration, infirmity; sudden (94)								
CHEST; OPPRESSION (355)								
CHEST; INFLAMMATION; Lungs (165)								
CHEST; INFLAMMATION; Lungs; ground-glass appearance (2)								
RESPIRATION; DIFFICULT (438)								
RESPIRATION; DEEP; impossible (27)								
GENERALITIES; LIE down; inclination to (213)								
Loss the senses of smell and taste (186)								
STOMACH; APPETITE; wanting (352)								
MOUTH; DISCOLORATION; white; tongue (254)								
GENERALITIES; INFLAMMATION; bloodvessels; arteria (28)								
COUGH; INSPIRATION, on (53)								
COUGH; BREATHING; deep; agg. (83)								
COUGH; TALKING, from (102)								
CHEST; PAIN; General (489)								
CHEST; PAIN; General; lungs (76)								
HEAD PAIN; VIOLENT (142)								
Headache during chill and fever (146)								
Headache worse bending head or stooping (172)								
Aching of the body during heat or chill (118)								
EXPECTORATION; SCANTY (70)								
EXPECTORATION; BLOODY, spitting of blood (244)								
EXPECTORATION; BLOODY, spitting of blood; streaked (78)								
Water food taste bad or bitter (62)								
MOUTH; DRYNESS (355)								

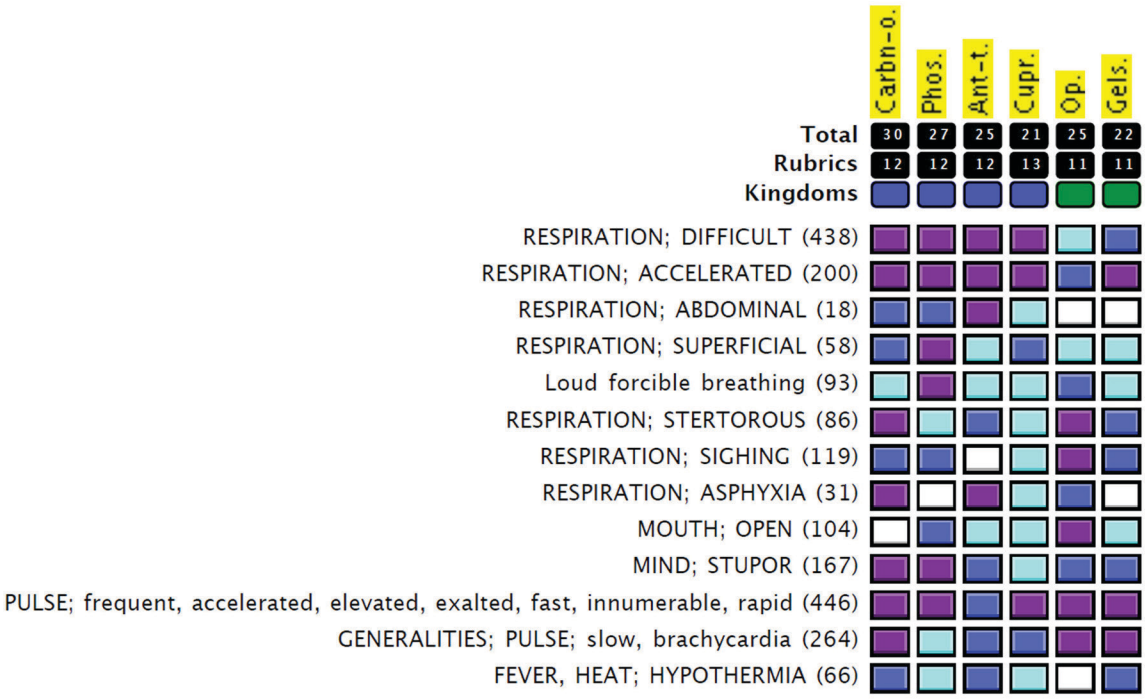

Ars.
Phos.
Lach.
Sulph.
Bry.
Bell.
Acon.
Carbn-o.
Total 168 149 134 137 132 133 129 121
Rubrics 76 71 73 70 67 67 69 59
Kingdoms
THROAT; DRYNESS (307)
Diarrhea during chill and fever (72)
Nausea during chill and fever (90)
NOSE; DISCHARGE; watery (187)
NOSE; SNEEZING (325)
NOSE; EPISTAXIS (305)
Epistaxis during chill and fever (38)
EYE; DISCOLORATION; redness (269)
Sleepiness during the chill and fever (81)
EXTREMITIES; CHILBLAINS (105)
RESPIRATION; ACCELERATED (200)
RESPIRATION; ABDOMINAL (18)
RESPIRATION; SUPERFICIAL (58)
Loud forcible breathing (93)
RESPIRATION; STERTOROUS (86)
RESPIRATION; SIGHING (119)
RESPIRATION; ASPHYXIA (31)
MOUTH; OPEN (104)
MIND; STUPOR (167)
PULSE; frequent, accelerated, elevated, exalted, fast, innumerable, ...(446)
GENERALITIES; PULSE; slow, brachycardia (264)
FEVER, HEAT; HYPOTHERMIA (66)
Thrombosis (128)
BLOODY, spitting of blood; clotted, coagulated; tendency (36) GENERALITIES;
APOPLEXY (135)
CHEST; INFLAMMATION; Heart (139)
CHEST; INFLAMMATION; Heart; pericardium (79)
CHEST; DROPSY; Pericardium (14)
Dilation of the heart (90)
GENERALITIES; PULSE; irregular (260)
Bluish blackish skin (133)
Bluish blackish hands and feet (91)
HEAD; INFLAMMATION, of; Brain (90)
HEAD; INFLAMMATION, of; meninges, meningitis (116)
ABDOMEN; INFLAMMATION, peritonitis, enteritis; Liver (130)
ABDOMEN; ENLARGED; Liver (99)
KIDNEYS; SUPPRESSION of urine (129)
URINE; ALBUMINOUS (233)
URINE; BLOODY (169)
EYE; INFLAMMATION; conjunctivae (178)
EXTREMITIES; DISCOLORATION; redness; fingers (47)
EXTREMITIES; DISCOLORATION; redness; toes (32)
EXTREMITIES; ERUPTIONS; vesicles; fingers; tips (5)
EXTREMITIES; ERUPTIONS; vesicles; toes (15)
EXTREMITIES; ERUPTIONS; pustules; fingers (21)
EXTREMITIES; ERUPTIONS; pustules; toes (6)
SKIN; ERUPTIONS; vesicular (201)
SKIN; ERUPTIONS; blisters (79)
Purpura (127)
SKIN; GANGRENE, from burns or gangrenous sores (77)
DISCOLORATION; blackness of external parts, gangrene (110)
SKIN; SORE, becomes, decubitus (93)

Repertorization of the Covid-19 Symptoms-Related Acute Respiratory Distress Syndrome

"The good news is that since May 3, 2020 the day after the [AIH] webinar, I was able to complete the [Materia Medica Pura Project] monograph on Carboneum oxygenisatum and made close to 1250 new entries to the repertory under Carbn-o. The PDF of the repertorization clipboard that I am now sending you reflects these additions.

You will notice that for Acute Respiratory Distress Syndrome of Covid-19, Carboneum oxygenisatum is now well represented."

(Dr. André Saine, ND, in an email communication dated 6/7/20)



The American Institute of Homeopathy presents Professor George Vithoulkas and the Top Professional Instructors of the International Academy of Classical Homeopathy

ONLINE 2020
Annual AIH Conference
October 30–November 1, 2020

Topics include:

- Core Concepts of Homeopathy as propounded by Professor George Vithoulkas and the IACH
- Cured Case reports utilizing the concepts of the "Continuum Theory" of Professor George Vithoulkas
- Clinical Research overview of the concepts of the "Continuum Theory" of Professor George Vithoulkas

"Professor George Vithoulkas' teachings of Classical Hahnemannian Homeopathy have been a profound inspiration and guiding light for me and a multitude of professional homeopaths throughout the world. His lecture at Stanford Medical School in 1978, entitled "The Fundamental Laws of Natural Healing," which I organized as a medical student influenced several young doctors and launched the homeopathic careers of myself and many others. Professor Vithoulkas' famous text, "The Science of Homeopathy," remains 'must-reading' for all those who wish to deeply understand the principles and practical application of homeopathic medicines. I strongly recommend the teachings of Professor George Vithoulkas and his International Academy of Classical Homeopathy to anyone who wishes to become a serious, well-trained homeopath."

Mitchell A. Fleisher, M.D., D.Ht., D.A.B.F.M.
Second Vice President, American Institute of Homeopathy

I studied with Professor Vithoulkas for several years, culminating in a year's period of study at one of his centers in northern Athens. During that time, I saw patients and conferred with George regularly. Given this extensive exposure, my familiarity with the quality and accuracy of his teaching is considerable. I can attest to George's vast knowledge of Classical homeopathy. His prescribing accuracy was phenomenal, as confirmed by direct observation and extensive, sometimes years-long follow up. George is very generous with his teaching, and his devotion to homeopathy is complete. His teaching is wildly popular in Europe and around the world. His beautiful and impressive teaching facility on Alonnisos island, Greece, the International Academy of Classical Homeopathy, is very successful and well worth a trip. There are very few teachers of homeopathy that I consider on a par with George Vithoulkas, and no one who surpasses him in knowledge of and artistry with Classical Homeopathy.

George Guess, M.D., D.Ht.
Editor Emeritus, *American Journal of Homeopathic Medicine*

Dr. Atul Jaggi

Dr. Atul Jaggi began his studies of Homeopathy in 1991 when he entered Nehru Homeopathic Medical College and Hospital in New Delhi. His real homeopathic evolution began in 1996, when he joined the first group of the Four Year Course in the International Academy of Classical Homeopathy (IACH), headed by Prof. George Vithoulkas. He is a member of the teaching faculty of the IACH in Greece and also gives International seminars. His main mission is to bring students in contact with the life changing teachings of Prof. George Vithoulkas in order to promote Hahnemannian Classical Homeopathy.

Dr. Seema Mahesh

Dr. Seema Mahesh is a renowned classical homeopath from Bangalore, India, practicing for the past 16 years. After completing her medical education, she went on to achieve her diploma at the International Academy of Classical Homeopathy in Greece under the teachings of Prof. George Vithoulkas. She is currently the director of research at IACH in Greece. She is instrumental in communicating the core concepts of homeopathy as propounded by Prof. Vithoulkas to the conventional medical journals and conferences. She has been invited to teach homeopathy all over the world, including Australia, Egypt, Germany, Turkey, Thailand, Malaysia, etc., and is currently a research scholar at the esteemed Taylor's University in Malaysia, and is researching the concepts of the "Continuum Theory" of Prof. Vithoulkas.

Registration Fees: https://homeopathyusa.org/education/2020-conference.html

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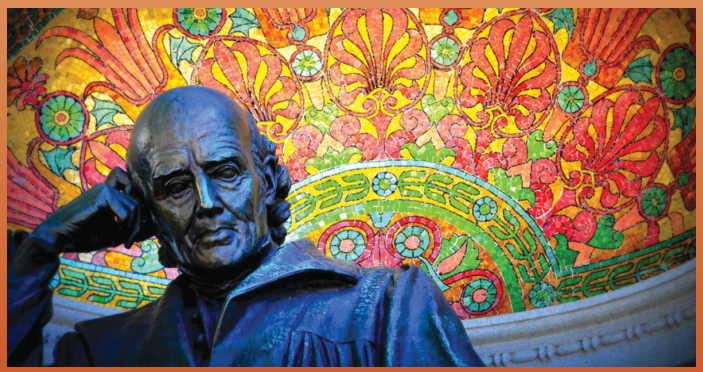


In Memoriam: Toni Bark, MD (August 1, 1959 - March 3, 2020)

Toni Bark, MD, (LEED AP), graduated from Rush Medical College in Chicago, Illinois in 1986. Dr. Bark completed her pediatric residency training at the University of Illinois, Chicago, in 1991, and trained at New York University in pediatrics from 1986 through 1987 and in Rehabilitation Medicine from 1987 through 1988. Immediately post-residency, Dr. Bark worked as an attending staff physician in the Neo-Natal Intensive Care Unit at Michael Reese Hospital. She then took a position as the Director of the Pediatric Emergency Room at Michael Reese Hospital until 1993 when her commitment to natural remedies led her to begin her study of holistic medicine, including nutritional medicine, classical homeopathy, and hypnotherapy.

She initially studied homeopathy at The New England School of Homeopathy in Massachusetts and National Center for Homeopathy summer school courses. Dr. Bark subsequently studied extensively with internationally renowned homeopaths such as Massimo Mangialavori, Vassilis Ghegas, Rajan Sarkaran, Divya Chhabra, Jan Scholten, Paul Herscu and Louis Klein.

She maintained a successful private practice in homeopathy and was the Medical Director for the integrative Medicine Department of Advocate Health Care Systems at Good Shepherd Hospital from June of 2000 until July of 2003.

She earned a Master's degree in Medical Disaster Response, a Leadership in Environmental and Energy Design (LEED) accreditation, as well as many certificates in classical homeopathy and aesthetic medicine. She was a contributing author for the following works: *Silent Epidemic*, *Textbook of Complementary and Alternative Medicine, Vaccine Epidemic*, and was a co-producer of the film, *Bought*. Dr. Bark was an avid lecturer for medical and health conferences, as well as an expert witness in many legal cases involving vaccines and vaccine injury.

In 2012, Dr. Bark served in the position of Second Vice President of the American Institute of Homeopathy (AIH). She also received her masters degree in Healthcare Emergency Management (MHEM) from Boston University Medical School that same year.

Reminiscences by Colleagues

Toni was a brilliant, beautiful, spirited woman with a very strong thirst for learning and an indomitable firebrand for truth in medicine. We first met when she attended the introduction to homeopathy class that I taught at the NCH summer school in the 1990s. We were close friends and confidantes. She believed that her cancer arose from her severe exposure to Stachybotrys mycotoxins several years ago in a home that needed to be demolished. Toni was a vital, shining star and courageous leader in homeopathy and the movement to bring truth and justice to bear on the vaccine industry. I am profoundly saddened by Toni being taken from her active life, her family, and from all of us far too soon. May her spirit soar with angels.

-Mitchell A. Fleisher, MD, DHt

I recall vividly the first time I met Dr. Toni Bark in the spring of 2012. She had just become a Trustee of the AIH Board, and I was immediately struck by her confidence and her ease in talking on any subject. I remember thinking, "What a strong and dynamic person!" Over the next few years, as I learned about her life, I was deeply impressed by so many things—her adoption of a teenage Rwandan Tutsi refugee into her already-blended family with two sons, her travels to Haiti to help with the earthquake disaster, her building of an incredible ecologically green house (with her architect-husband), and on and on. Her physical strength was also astonishing to me—her acrobatic skill using aerial silks was simply amazing.

During her tenure on the AIH Board, Toni had enrolled in a Master's degree program in Disaster Management at Boston University. I greatly enjoyed hearing about all that she was learning. As many of you know, Toni had been the Medical Director of the Pediatric Emergency Department at Michael Reese hospital in Chicago. As one might expect from her strong personality, she had admonished those moms whose children had not

been vaccinated and undoubtedly was very effective at getting them vaccinated. But she had begun to notice that children who came to the ER with seizures had often been vaccinated that same day in the "vaccine clinic." Unlike many physicians who never seem to see this connection, she chose to review the research on vaccine safety for her Master's thesis. Although other AIH colleagues had spoken about adverse effects from vaccines (which had also been reported to me by children's mothers), it was Toni who informed me of one fact that truly astonished me. She explained that true placebos were not being used in safety studies; i.e., they compared the vaccine to a so-called placebo which actually contained an aluminum adjuvant, which is known to be a neurotoxin. Thus, it was immediately apparent to me that this was medical fraud. She shared her findings with some faculty at Boston University and they were also astonished and encouraged her pursuits.

Eventually, Toni began to serve as an expert witness in "Vaccine Court." Having seen multiple videos in which Toni talked about vaccine safety to legislators as well as the public, my impression was that Toni was an outstanding expert witness—she knew the science extremely well and she could explain it to others in a very effective manner. Her passion for truth was apparent to anyone who ever watched her speak.

Toni once told me that no matter what she felt she had to fight for those who had been harmed by vaccines and to prevent harm to others. This reveals a very deep moral courage which I greatly admired.

Despite the relatively little time I had to get to know Toni, I am left with a feeling of loss for such a vibrant, generous, and courageous person. She will be missed deeply by so many.

- Irene Sebastian, MD, PhD, DHt

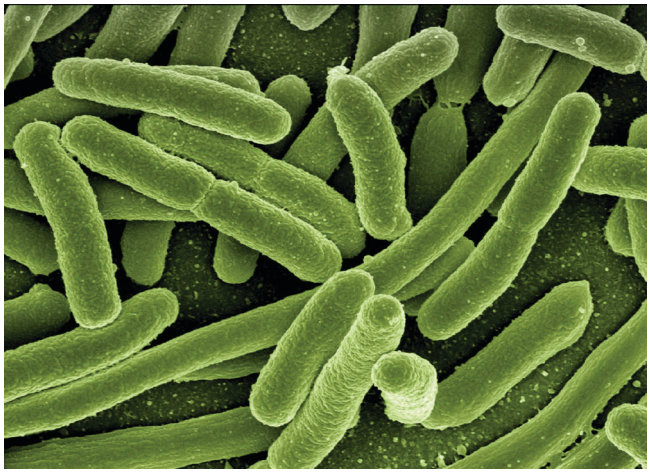
The Unscientific, Fear-Based War against the *Microbiome*

Ron Whitmont, MD

"I worry that the past two months of quarantine have given people the idea that the way for humans to win our million-year war with microbes is to avoid them completely. And I'm here to tell you…. you can't. The key to beating COVID isn't dining through glass, never going to a concert or a ballgame again. It's your immune system. You hear people say COVID-19 is a new virus so the immune system doesn't know how to handle it. Of course, it does. That's why the vast majority who've had it either recovered or didn't even know they had it. What do you think did that? The human immune system…. compulsively washing, being scared of your own hands…. That can't become the new normal."[1]

Superficially this crusade against microbes *sounds* justified, but in reality, it is a war against our-selves. The "call to arms" to fight germs and other micro-organisms is evidence of an unwitting, propaganda-based, misinterpretation of scientific information being used to cow the population into harmful and misguided treatments. The patterns of susceptibility exposed by COVID-19 demonstrate that this "war" is damaging the human immune system, microbiome, environment and is destroying our health.

> "The account of heroic man persevering over a heartless Mother Nature needs to be corrected. Despite all the lab coats and microscopes, the March of Dimes and the Nobel prizes, the enemies were actually our own clever designs the whole time."



Escherichia coli

Waging an all-out war against microbes by reducing contact with bacteria, viruses and fungi in the natural environment throughout the human life cycle (excessive hygiene, vaccines, antibiotics, etc.) has backfired by *increasing* susceptibility to diseases of microbial origin, and escalating the risk of developing a wide range of other illnesses, including those of inflammatory,[3] autoimmune[4] and neoplastic[5] origin. A detailed graphic from The *New England Journal of Medicine* clearly demonstrates this inverse relationship between the elimination of infectious diseases and the endemic rise of chronic inflammatory illnesses in our society.[6] The COVID-19 pandemic is just one example of how many of the modern pharmaceutical interventions have led us into this crisis, and that if we expect to recover, it's time to face the evidence.

If one thing is universally recognized about the COVID-19 virus, it is the fact that it is more likely to be deadly for those who are already affected and being treated for chronic medical problems (obesity, diabetes, hypertension, etc.). According to worldwide health statistics, at least 82% of those infected with COVID-19 will experience mild, moderate or no symptoms whatsoever.[7] Essentially, a "healthy" immune system coupled with a healthy microbiome is sufficient to protect most people from adverse events associated with this virus.

The pattern of susceptibility exposed by COVID-19 starkly demonstrates that reliance on certain conventional allopathic medical interventions may be the single most important risk factor for dying from this virus. This "elephant" hiding in the room has been ignored by the entire news media cycle and every single major medical institution (from the government on down). Instead of facing the "inconvenient truth" that some conventional medical therapies increase susceptibility, the universal institutional response has been to double-down on fear-based propaganda aimed to push the population toward unquestioning acceptance of more of these same interventions.[8]

Samuel Langhorne Clemens (Mark Twain) wrote:

> "The glory which is built upon a lie soon becomes a most unpleasant incumbrance.… How easy it is to make people believe a lie, and how hard it is to undo that work again!"[9]

If an impartial scientifically-based inquiry could be held, rather than the propaganda and fear-based media storm our society is currently engaged in, we would be less likely to welcome the next generation of anti-viral medicines and vaccines and look more favorably on homeopathy precisely because it benefits immunity, sustainably supports the human microbiome and has an impeccable track record of safety treating and preventing diseases of epidemic origin.[10]

Absent from the current media assault is a level-headed, nonpartisan, science-based evaluation of how our society arrived at the critical juncture where a significant portion of the population suffers from one or more chronic illnesses and is now

increasingly vulnerable to dying from a mutated "cold virus."

Disease susceptibility varies between individuals, which is reflected by microbiome science, and is one reason why individualized homeopathy is so effective. The COVID-19 pandemic may be an "act of nature," but it exposes a very dark and ugly side of conventional pharmaceutical medicine: those individuals who are most susceptible to this virus are the same ones who have trusted and relied most heavily on conventional pharmaceutical drugs and immunizations.

Roughly 18% of those infected with COVID-19 will develop severe symptoms and somewhere between 1-15% will die (depending on demographics and scope of testing). Those who have died suffered from at least one preexisting chronic illness, which is endemic in Western society. According to the Centers for Disease Control and Prevention (CDC) 60% of Americans currently suffer from one chronic illness and 40% suffer from two or more.[11] These conditions (and some of the pharmaceuticals used to treat them) are risk factors for developing complications from COVID-19.[12]Chronic illness, which is driven by chronic inflammation, is the result of immune system dysregulation and dysfunction that ultimately reaches every organ system in the body. The driving force behind inflammation is the immune system,[13] and the driving force behind the immune system is the human microbiome.[14] There is robust evidence that many forms of chronic illness are the direct result of medical interventions that damage or disrupt the microbiome.[15]

The microbiome is considered the "invisible organ" responsible for regulating the immune system and keeping it in symbiotic balance.[16] When microbiome diversity is high and working in symbiosis with the immune system, inflammation is low.[17] Inflammation is an immune system response to microbiome dysbiosis. Chronic inflammation is often the result of chronic dysbiosis of the microbiome. When the human microbiome suffers from loss of diversity, or dysbiosis, the immune system generates both local (acute) and systemic (chronic) inflammation.[18] When dysbiosis persists, so does inflammation.[19] Conventional pharmacologic management of chronic inflammation suppresses and contains it.

Most of those who have died from COVID-19 (and diseases of similar origin) progress through what is known as a "cytokine storm,"[20] an immune system over-reaction that floods the body with a tsunami wave of inflammatory chemicals, as if a dam had burst and long-suppressed immune inflammatory chemicals were released. The cytokine storm of COVID-19 is more likely if the immune system-microbiome axis has been suppressed and contained by the pharmacologic treatment of inflammatory illness.[21,22]

Viruses are nonliving organisms, considered the most ubiquitous biological agents on the planet: in nature they outnumber bacteria by more than ten to one,[23] and in the healthy human body there are more than ten times as many latent and asymptomatic viruses (380 trillion) than individual human cells (37 trillion).[24] The overwhelming majority of viruses in the human virome (the total collection of viruses in and on the human body) have never been characterized or named,[25] but appear to be either benign or beneficial to health.

Out of all viruses, only a very small fraction has ever been associated with human disease.[26] In these, the degree of virulence depends not only on the virus itself, but on the milieu of the microbiome and the complex symbiosis between it and the immune system. Viruses, just like bacteria, fungi and protozoa, are largely pathobionts: organisms capable of blending into the microbiome symbiotically or of disrupting it in a manner that causes dysbiosis, inflammation and illness.[27] Pathogenicity and susceptibility to any infection (viral or otherwise) depends on the disease agent and its ability to generate inflammation or establish a tolerant relationship between the microbiome and the immune system. The vast overwhelming majority of microbiome-immune system interactions are symbiotic or commensal (not pathogenic and inflammatory), even though we have long been led to believe the opposite.

> It goes against dogma to think that bacteria [and viruses] would make our immune systems function better... But the picture is getting very clear: the driving force behind the immune system are commensals.[28]

Viruses (and other organisms) act commensally, symbiotically or pathogenically depending on the working relationship established between the host immune system and the microbiome. Virus specific factors play important roles, but degree of pathogenicity and susceptibility are largely determined by individual factors relating to the health and stability of the microbiome and the immune system of the host.[29]

Susceptibility to illness depends upon a healthy interplay between the immune system and the microbiome (symbioisis). The epidemic of chronic inflammatory disease currently affecting most developed nations, and the U.S. in particular, is the result of a breakdown in this networking symbiosis between these two essential organs.

Many factors influence the human microbiome-immune system axis and thereby contribute to disease susceptibility. Toxins, pathogens, drugs, and psycho-neuro-endocrine stressors are some of the most common causes, but the history of modern conventional pharmaceutical medicine reads like a textbook on how to suppress the immune system and damage the microbiome, in part because the "germ theory" strongly advocates it.[30]

The U.S. population spends the most on health care, is the most heavily medicated and chronically ill population on earth[31] and has the lowest life expectancy at birth among comparable nations.[32] Not only is longevity declining in the US, but "health life expectancy" is also shrinking. The US is at the forefront of chronic inflammatory illness,[33] and this has put us at the forefront of deaths from COVID-19. This is not a coincidence.

COVID-19 is most destructive (causing a "cytokine storm") in those individuals suffering from immune system dysfunction and microbiome dysbiosis (the ecological definition of chronic illness), and who are medically managing their condition. Most healthy individuals respond less violently and more tolerantly to COVID-19 allowing it to become integrated into the human virome and the functional symbiosis regulated by the immune system.

Viruses (and other microorganisms) are *not* the enemies of

health, as we have long been led to believe; they are the most crucial agents on the planet in promoting it. Between 40-80% of the human genome is the direct result of ancient viral "infections."[34] Not only is COVID-19 generally harmless in a healthy individual, but it might even turn out to be beneficial, as a great many other viruses have.

Herpes simplex virus (HSV1) destroys late stage malignant melanoma tumors,[35] reduces the risk of metastatic breast cancer,[36] and along with the "common cold" virus, destroys breast, prostate, bladder and brain cancer cells;[37,38] measles virus destroys breast cancer tumors,[39] ovarian cancer cells,[40] hepatocellular carcinoma[41] and prostate cancer,[42] while reducing the severity of kidney disease;[43] coronaviruses[44] and other viruses[45] are effective in both preventing and treating breast cancer; hepatitis A virus (HAV),[46] measles virus[47-51] and varicella virus[52] (chicken pox) lower the risk of atopy and allergies; measles, mumps[53] and varicella[54] viruses reduce the risk of dying from cardiovascular disease and stroke by more than 28% in men, and 16% in women.

There is no question that many viruses are intimately involved with promoting and maintaining health, preventing cancer and reducing inflammation throughout the body. We wage wars and destroy these microbiological agents at our own peril.

The COVID-19 pandemic provides us with a unique opportunity to examine modern medicine and its role in public health. In the midst of a media-driven propaganda storm of misinformation about health, immunity, safety and illness, it is critical to rely on a foundation of science. Facing these "inconvenient truths" about the nature and benefits of the immune system and the microbiological world may throw off the fear-based shackles that have placed our society on a dangerous trajectory beginning with an epidemic of iatrogenic chronic inflammatory disease and ending with a population at significantly increased risk of dying from a mutated "cold virus."

Homeopathy, and the promotion of the human microbiome offer the most sustainable solution to this crisis. Recognizing that the immune system and the microbiome are critical agents that promote and sustain health may limit this misguided "war" against these organ systems. The COVID-19 pandemic provides ample evidence of the negative results of this war.

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COVID-19: A Review of Preliminary Clinical and Pathologic Findings

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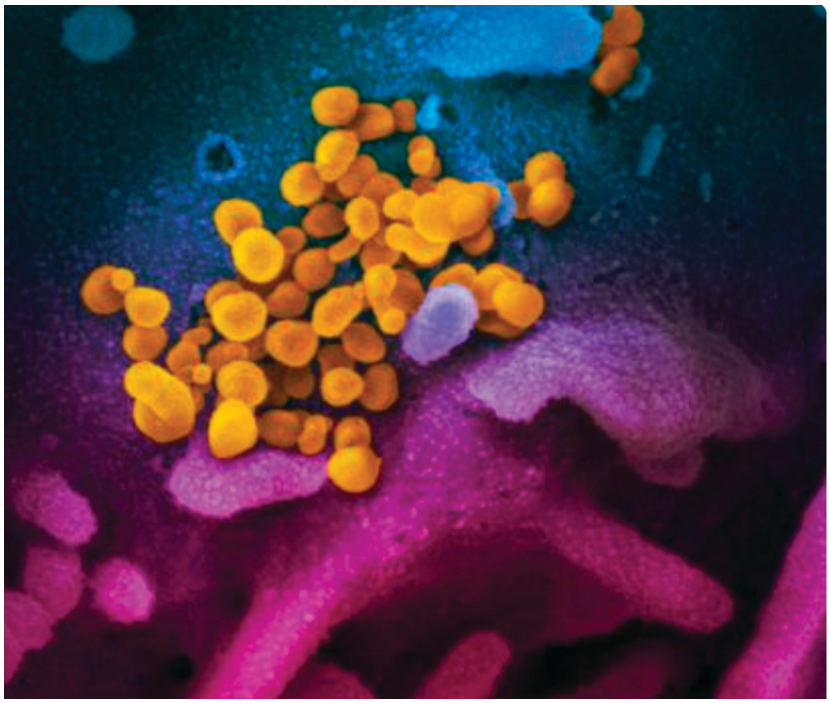
Abstract: This is a review of some of the currently available medical information regarding the COVID-19 pandemic. Readers should be aware that COVID-19 is a novel coronavirus virus and there is still much to understand and discover about this complex new disease. The information presented here is current as of May 2020. However, this is a rapidly evolving situation with new data and questions arising daily. This article will focus on the available demographics, testing, clinical presentations and pathophysiology of COVID-19.
Keywords: COVID-19, r-naught, Adult Respiratory Distress Syndrome (ARDS), antigen testing, pandemic, homeopathy

Introduction

As of May 2020, Severe Acute Respiratory Syndrome-Coronavirus 2, also known as SARS-CoV-2, and now designated coronavirus disease 2019 (COVID-19), is affecting at least 210 countries or territories. Worldwide there are more than 3 million cases with over 220,000 deaths reported.[1] This novel corona virus has already surpassed the deaths from an average entire season of influenza in a few, albeit long, weeks. These numbers are despite aggressive social distancing and stay at home orders or recommendations by many states. Based on past pandemics, the most infamous of which is the 1918 influenza pandemic, we can expect more waves in the coming months to perhaps even years. Many states have yet to see the peak of their first wave, but if New York is any indication of what is to come, we need to be prepared for the long haul. As we struggle to "flatten the curve" in order to avoid overloading our healthcare systems beyond capacity, we will necessarily extend the duration of the pandemic. We know physical distancing and home quarantines are working to mitigate the spread, but this will not eliminate the virus from the world-wide population. It will not simply disappear. It is commonly accepted by experts such as Dr. Fauci, Director of the National Institute of Allergy and Infectious Diseases (NIAID), that this deadly virus is here to stay.



This scanning electron microscope image shows SARS-CoV-2 (yellow), the virus that causes COVID-19--isolated from a patient in the US- emerging from the surface of cells (blue/pink) cultered in the lab. *Credit: NIAID-RML*

Homeopathy's Success in Past Epidemics and Pandemics

Enter the elegance of Homeopathy: Is Covid-19 proving to be out of reach of homeopathy? No. Homeopathy has a long and proven track record in epidemic and pandemic disease. The power and reliability of homeopathy lies in following the clear and consistent process for remedy selection and prescription as clearly and concisely outlined in the *Organon*. Paragraphs 100, 101, 102 pertain specifically to epidemics. Paragraph 100 reminds us that novel or not, it makes no difference to the homeopathic practitioner. As is clearly stated in this paragraph: "… the physician must any way regard the pure picture of every prevailing disease as if it were something new and unknown, and investigate it thoroughly for itself, if he desire to practice medicine in a real and radical manner, never substituting conjecture for actual observation…"[2] Hahnemann goes on to state that we must examine the disease in all its phases; i.e., stages. This novel disease, then, is not insurmountable to the experienced homeopathic practitioner. We must, as has been stated, however, be cautious in prescribing based on conjecture alone. We encourage you to peruse the American Institute of Homeopathy (AIH) website for webinars and slide presentations pertaining to Homeopathy's approach and successes in past epidemics and

pandemics and in the treatment of pneumonia. Some notable presentations on the website include Dr. André Saine's most recent comprehensive homeopathic webinar from May 2, 2020 titled: "Case Management of the COVID-19 Patient with Genuine Homeopathy During the COVID-19 Pandemic: An Update." In this presentation, Dr. Saine discusses in depth his growing experience treating COVID-19 patients. He also details his experience assisting a physician colleague in Lyon, France. This physician has been homeopathically treating and prescribing homeoprophylaxis effectively in a nursing facility with the help of Dr. Saine. It is an impressive presentation. It is clear that following classical homeopathic principles of the individualized single remedy prescription (and changing remedies when appropriate) is the key to successful management of COVID-19 patients. There is also an excellent PowerPoint presentation by Nick Nossaman, MD, titled: "Guidelines for the Use of Homeopathy to Treat the Patient with Flu-like Symptoms During the COVID-19 Pandemic." The AIH's first COVID-19 webinar from March 18th, 2020, is also available. We encourage everyone to view theses webinars. The AIH and other homeopathic organizations within the US and around the globe are closely tracking and logging individually prescribed remedies for managing Covid-19 patients. Visit our website to view the AIH database; submit cases and let's all work together to do what we know homeopathy does best, "…restore the sick to health, to cure, as it is termed."[2]

Background

The World Health Organization (WHO) was first alerted to a cluster of cases with a severe and mysterious pneumonia in Wuhan city, capital of Hubei province, China on December 31, 2019. This early WHO report goes on to say that as of January 3, 2020, a total of 41 patients with pneumonia of unknown etiology were reported to the WHO.[3] On January 7, 2020, Chinese health authorities confirmed that this cluster was associated with a novel beta-coronavirus, initially labeled 2019-nCoV and later SARS-CoV-2. The full genetic sequence was shared through the National Institutes of Health GenBank database.[4] On January 11, 2020, China officially recorded its first death, a 61-year-old Chinese male admitted with pneumonia that went on to develop Acute Respiratory Distress Syndrome. By January 31, there were 213 reported deaths and 9,720 confirmed cases in China.[5] Since this first official WHO report, the coronavirus SARS-CoV-2, now designated COVID-19, has spread around the globe. On March 11, 2020, it was officially declared a pandemic by the WHO.

This strain was ultimately identified as a novel type of beta-coronavirus, a zoonotic pathogen that bears a close resemblance phylogenetically to Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-1) and Middle East Respiratory Syndrome Coronavirus (MERS-CoV). COVID-19 was initially reported to have been traced to a wet seafood market in Wuhan and the outbreak likely started from a zoonotic transmission event possibly from bats. SARS-CoV-2 is 96% identical at the whole-genome level to a bat coronavirus.[6] There is investigation underway to determine its most precise origins. What became clear early on, however, was that efficient person-to-person transmission was occurring.

The United States officially reported its first case on January 20 in Snohomish County, Washington. The patient, a 35-year-old man with recent travel to Wuhan, China, went on to be hospitalized at Providence Regional Medical Center for observation after collected specimens revealed he tested positive for COVID-19. The patient reported dry cough, fatigue, fevers, nausea and vomiting. Laboratory results revealed leukopenia, mild thrombocytopenia, elevated creatine kinase and abnormalities in his liver functions and lactate dehydrogenase. His chest radiographs initially were reported as negative; however, a second one on hospital day 5 showed evidence of pneumonia in the left lower lobe, and he became symptomatically hypoxic. He went on to develop bilateral atypical pneumonia. On hospital day 7, he was given remdesivir after physicians pursued administration under compassionate use of an investigational antiviral therapy. The patient's clinical condition improved, and he was subsequently discharged.[7]

Initially, it was believed that the first U.S. fatality was on February 29, 2020, in Kirkland, Washington. More recent information has revealed there were earlier deaths due to COVID-19. Santa Clara County California health officials are now revealing the first deaths from COVID-19 in the United States likely occurred weeks earlier than previously thought.[8] At least two people who died in their homes in early and mid-February had tissue samples taken during autopsy which came back positive for COVID-19. It is highly likely, therefore, that the virus had been circulating within our population for weeks if not months earlier than suspected.

Epidemiology

An accurate total case count for COVID-19 is unknown since this would have required large scale population testing. That said, as of the writing of this article, the US is reporting over 1 million confirmed positive cases since testing was initiated. Widespread testing has been an ongoing issue in the US during this pandemic. The worldwide number of test positive cases is 3.17 million as of April 29, 2020.[1] The actual number of cases can be assumed to be significantly higher. It is also apparent, many cases are mild and up to 40% by some estimates are asymptomatic.[9] The mortality rates of symptomatic patients generally range from 2% to 18% depending on age, country, ethnicity, access to healthcare, living environment, sex, underlying comorbidities, etc. Belgium, France, Italy, the United Kingdom, and Spain are reporting the highest mortality rates at present. Germany posts a rate of 3.9% and the US lists a case-fatality rate of 5.8%.[10] Many experts feel the US numbers will need to be re-examined and reclassified over time as more data is collected and analyzed. China continues to modify its initial reported mortality rates. A recent unpublished report from New York governor Andrew Cuomo in the *New York Times* on April 23, 2020, showed 14% of randomly selected asymptomatic people in New York City were COVID-19 antibody positive. This would mean the number of people that have been infected with the virus is much greater than the reported positive case rate suggests. Regarding testing, there are currently 2 types

available. The first is direct viral testing which looks for the presence of the virus in secretions using RT-PCR or reverse transcriptase polymerase chain reaction technology, typically and preferably from a nasopharyngeal source. This is the type most commonly reported in the media. The second type is antibody testing. This looks for evidence of an immune response to the virus with the development of antibodies and suggests prior infection. It remains unclear if having an antibody response to the virus and thus a positive antibody test confers immunity, and if so, how long the immunity lasts. *Be aware, there are numerous approved and unapproved tests being marketed in the United States with variable levels of sensitivity, specificity and reproducibility*. Hopefully, this will become more standardized over time. Access to reliable testing has been an ongoing problem with our pandemic response.

The r-naught (R0) or the reproductive number is the number of people who can typically be infected by someone shedding the virus. For COVID-19 this is up to 2.7 according to the CDC. A more recent review of Chinese data suggests a higher R0, which could be as high as 6.6.[11] In contrast, the R0 of seasonal influenza is 1.3. As of May 4, 2020, total COVID-19 test positive cases in the US number over 1 million and over 68,000 deaths with a mortality of 5.5% for symptomatic test-positive cases.[12] These numbers continue to climb daily. To date this is the highest number of reported cases and deaths of any country. In the greater than 65-year-old population mortality is 3-4 times higher. Patients of color and those in nursing facilities and group-living environments are proving to be the most vulnerable populations with the highest overall mortality rates. It is important to note, however, that all age groups are at risk of death from COVID-19. By contrast, typical seasonal influenza mortality is generally around 0.1% and accounts for 12,000 to 60,000 deaths per year. Influenza mortality rates fluctuate year to year depending on the strain, number of people vaccinated and the vaccine efficacy.[13] Both influenza and COVID-19 mortality rates here have been calculated based on symptomatic patients. Some countries, in contrast, include asymptomatic COVID-19 positive patients in their mortality calculations. It is important to know the methodology of mortality calculations when discussing this disease and comparing it with other locations or infections such as seasonal influenza. The flu season is generally 6-9 months in duration. The US has already surpassed the estimated average yearly influenza mortality of 37,000 people in less than 2 months and it continues to climb. A recent study in JAMA showed that out of 5,700 hospitalized patients in New York City, 14% required ICU care, 12% received mechanical ventilation, and 3% renal replacement therapy. Overall, the mortality rate in this group of hospitalized population was 21%. *The most disturbing statistic of this study was an 88% mortality rate in those patients requiring mechanical ventilation*.[14] (*Journal of the American Medical Association* later clarified its initial findings, noting that 24.5% of the total number of ventilated patients had so far died while 72.2% remain in the hospital.)

Clinical Presentation

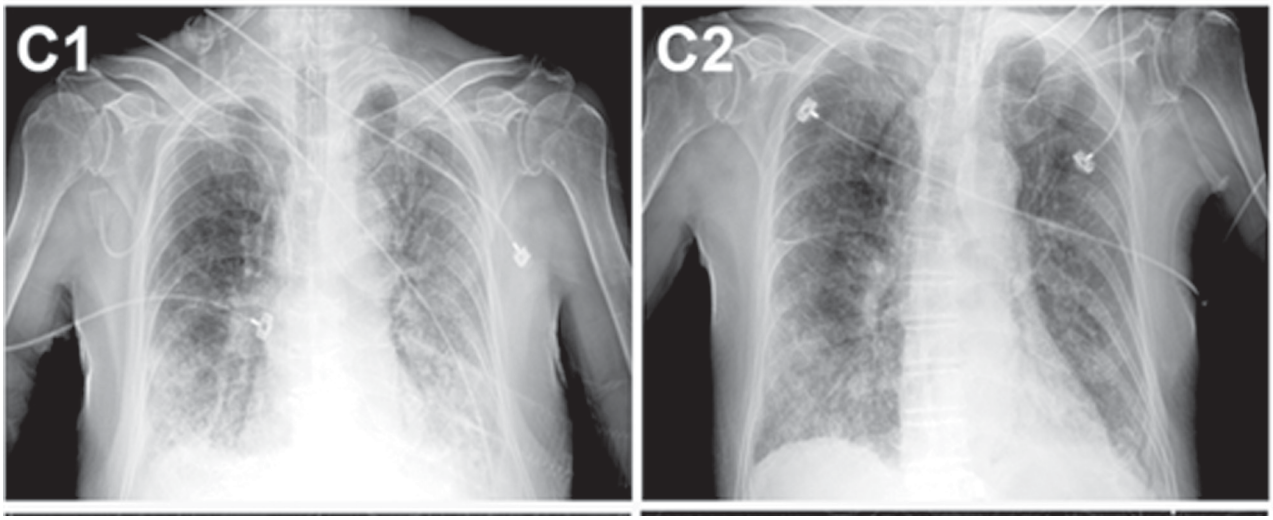
The median incubation period is 5 days. A total of 97% of people develop symptoms within 11.5 days. However, it is important to note that the incubation period in some patients is greater than 14 days.[15] Among those patients admitted to the hospital early in the pandemic the most common presenting symptoms were reported to be cough (80%), fever (77%), and dyspnea (56%).[16] The rates vary depending on the study. Recently published data from NYC in *JAMA* this month showed that only 31% of patients were febrile on presentation.[17] If confirmed in other studies, this could make screening protocols using temperature alone a far less reliable approach. Other symptoms include *loss of taste or smell, rigors, malaise, headache, diarrhea, nausea, vomiting, and myalgias*. Initial physical exam is often nonspecific with tachypnea and hypoxia being the most worrisome findings. Abnormal lab tests can include lymphopenia, thrombocytopenia, elevated LFT's and increased levels of inflammatory markers.[18] In patients presenting to emergency departments with symptoms, CXR and CT scans of the chest typically show *bilateral ground glass opacifications* which can progress to more dense areas of consolidation and pneumonia.[19] A study showed chest CT was 97% sensitive for diagnosing COVID-19 infection.[20] This could be helpful for a presumptive diagnosis if COVID-19 testing is unavailable or results are delayed. (Refer to images on following page, please.)

Some patients can deteriorate either slowly or very rapidly depending on numerous factors, including underlying comorbid conditions, time from onset of symptoms, and severity of symptoms at presentation. Worsening hypoxia and increasing work of breathing are the most concerning developments. In general, recovery tends to be slow, taking weeks or longer to recoup strength and energy.

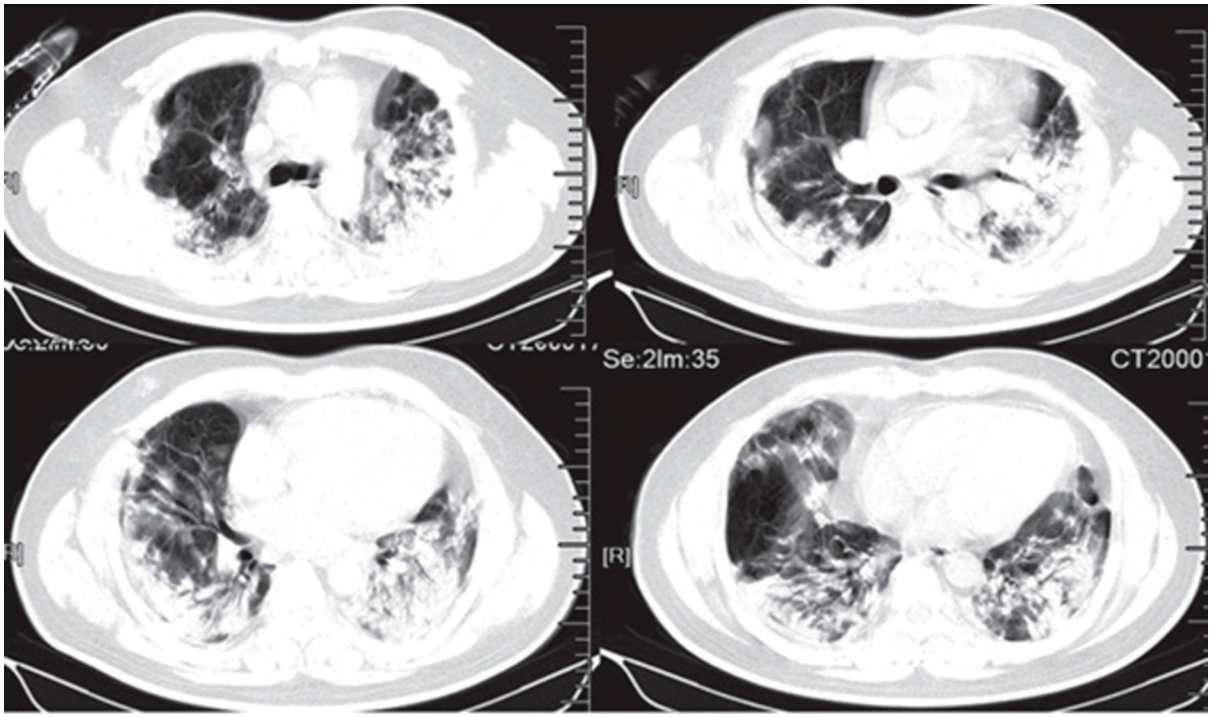
Pathophysiology

Most mortality is related to COVID-19 effects on the respiratory system. Autopsy data is limited, but pulmonary pathology generally shows diffuse alveolar damage (DAD). This is associated with alveolar edema, cellular exudates, desquamation of pneumocytes and hyaline membrane formation.[22] This damage results in increased alveolar collapse, reduced lung compliance, loss of surfactant, and decreased diffusion capacity. *All these factors make it difficult for oxygen to diffuse into the capillaries, bind to hemoglobin and be transported to the body*. (View lung pathology slide on page 20.)

It is felt the DAD is triggered by an inflammatory cascade or cytokine storm leading to widespread cellular damage. With sufficient damage, Acute Respiratory Distress Syndrome (ARDS) can develop resulting in progressive hypoxia and respiratory failure. Recently, COVID-19 has also been shown to adversely affect the liver, kidneys, and heart, all of which contribute to the virus's lethality.[24,25] In the lay literature, there have been many other theories proposed regarding the causes of hypoxia and death, but data is lacking for most of these theories and will not be reviewed here. As more autopsy data becomes available, there is also an increasing awareness of a systemic coagulopathy causing microvascular injury and *extensive microvascular*



Chest radiographs of two COVID-19 positive patients with bilateral ground glass opacifications.[21]



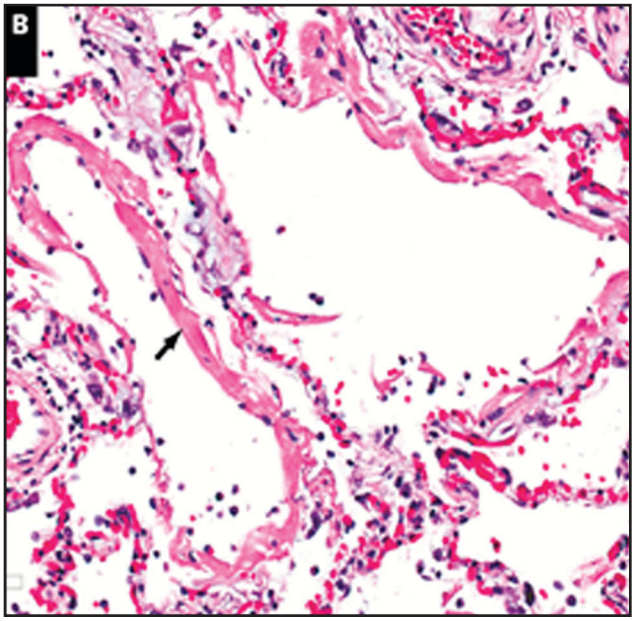
Transverse chest CT from a COVID-19 positive 40 y/o male with bilateral areas of consolidation.[19]

clotting with evidence of activated complement mediators.[26] Macrovascular thrombosis was also present. This includes arterial thrombosis leading to ischemic limbs, stroke, or MI, and venous clotting causing deep venous thrombosis and pulmonary embolism. An Italian study this month showed the overall incidence of thrombosis to be 21%.[27]

Scientists are debating about how the virus enters the cell. Initial data from the CDC on April 8th showed 72% of hospitalized COVID-19 patients had hypertension. There is data to suggest that COVID-19 uses the ACE receptor to enter the cell. It is not clear if ACE and ARB inhibitors open the gate to allow easier access to the cell thru up regulation of the ACE2 receptor.[28] Currently, there is no recommendation to stop these medications. There is a large observational study ongoing to try and shed some light on this issue.

Treatments

Treatment has mainly been supportive. This includes supplemental oxygen by various routes, antibiotics for concomitant bacterial infections, thromboprophylaxis, and careful monitoring. Hypoxia can be treated initially with supplemental oxygen, mainly using nasal cannula or face mask. If refractory hypoxia or excessive work of breathing occurs, the use of non-invasive ventilation such as BiPAP can be beneficial. When these measures fail, intubation and mechanical ventilation may be required. The need for ventilator support is often due to the



Lung with diffuse alveolar damage-arrow points to hyaline membrane.[23]

development of ARDS[19], and carries a mortality rate greater than 85% for COVID-19 patients.[29] ARDS is generally defined as acute onset of hypoxia with bilateral lung infiltrates in the absence of left heart failure with a PaO2/FiO2 ratio of <300.[30] The mortality rate of intubated patients is likely impacted by a number of additional factors. These include available local resources, qualified staff, complications of medical and procedural intervention, and the level of expertise in managing these most critically ill patients. ARDS is a complicated disease to manage in the most optimal of circumstances. It is also possible that the disease process may be largely irreversible by the time a person requires ventilator support, and no current treatment would alter the outcome. Some physicians suggest the observed ventilator mortality rate could be higher than usual due to ventilator-induced lung damage. There are guidelines for ventilator management to minimize ventilator-associated lung injury. ARDSnet, a National Institute of Health research network formed to study the treatment of ARDS, has evidence-based guidelines which have been validated using data from thousands of ventilator patients with varied causes of ARDS. These guidelines can be found at ARDSnet.org and use low tidal volume ventilation and permissive hypercapnea to reduce barotrauma. It also includes algorithms to minimize administered Fi02 to limit oxygen toxicity, optimize fluid management and other recommendations. There is uncertainty whether ARDSnet guidelines are being strictly followed, particularly in smaller hospitals, understaffed hospitals, hospitals lacking adequate intensivist coverage, or those experiencing large surges in patient volumes such as we have seen in New York City. The high mortality rates in ventilated patients have caused intensivists to begin a critical review of mechanical ventilation options in treating COVID-19 patients. Recently there have also been increasing reports of patients who were fairly stable that suddenly and severely deteriorate and expire. Postulated contributing factors in these cases may be thromboembolic disease such as pulmonary embolism or secondary events including myocardial infarction or stroke. *Truly, we still have much to learn about this disease.*

Several experimental treatments are being used and tested. There are ongoing concerns about the use of untested and unapproved medications for COVID-19. The recent unpublished VA observational trial reported in the news of hydroxychloroquine and azithromycin is showing no benefit and possibly even an increased mortality.[31] Additional studies are ongoing. Convalescent serum infusion shows promise with numerous anecdotal reports, but the data is still limited and the serum is difficult to collect and administer.[32] No large trials have yet been completed. The antiviral medicine remdesivir has been reported by Dr. Anthony Fauci (director of NIAID) to reduce time to recovery and a trend toward reducing mortality. This data is from a recent unpublished double-blind placebo-controlled trial with larger trials ongoing. It also suggests increased efficacy the earlier in the disease course it is administered. On May 1, 2020, the FDA has given remdesivir temporary emergency use authorization. It is currently administered only intravenously, is limited to the most serious patients, and will not be widely available for some time. There are news reports regarding unpublished observational data from China suggesting that high dose IV famotidine may improve outcome in COVID-19. A study protocol has recently been approved looking at this in New York and data may be available by the time this article is published.

Conclusion and Future Considerations

In conclusion, COVID-19 is a novel, highly contagious and serious disease which is spreading around the world. The ultimate impact of the disease is still not clear. No one knows how many people have been or will ultimately become infected or die from COVID-19 or how long the pandemic will continue. Social distancing has made some impact on the peak incidence (flattening the curve) but will not likely change the total number of people who will be infected over time. Why do some people without risk factors or underlying comorbidities succumb to this disease? What other factors contribute to susceptibility? We don't know if having had the illness provides lasting immunity. A provocative question for consideration by homeopathic providers is whether infected patients treated early and successfully in the course of their illness will display immunity on antibody testing post-homeopathic treatment.

Conventional orthodox medicine will continue to work on treatments and vaccines. Drug and vaccine efficacy, safety and toxicity will be important considerations as the rush for vaccines and antiviral treatments are aggressively pursued. Even if a vaccine is developed and found to be effective in inducing immunity, how long will that immunity last? Viruses, as we well know, mutate over time, particularly coronaviruses. It is likely this disease, too, will continue to mutate over time, since more than 30 mutations *have already* been identified, and this number continues to climb.[33] This will certainly impact vaccine development and efficacy. Will yearly or booster vaccines become common place and/or mandated? While the soon to be

published data on remdesivir seems somewhat positive, there are still many questions which must be addressed. The study was stopped early, before a statistically significant reduction in mortality might be demonstrated. Hopefully, the details of this study will soon be made available. Widespread testing including asymptomatic people for purposes of population surveillance remains an important directive if we hope to mitigate spread. Contact tracing is also a key public health measure, but is not yet widely established. Availability of highly sensitive and specific antibody testing will be essential as we move forward in re-opening the country after the current shelter-in-place orders are lifted. It is likely we will experience additional waves once the current wave wanes.

Homeopathy

It is essential for homeopathic practitioners to continue to treat, document and share our successes and failures as a global community. Historically, properly prescribed homeopathic remedies have had a pronounced impact on reducing mortality as well as in preventing disease (homeoprophylaxis) in prior epidemics and pandemics. Cuba as a nation has committed to successful homeoprophylaxis for recent outbreaks of Leptospirosis.[34] Homeopathic remedies in the management of COVID-19 patients will be addressed separately in this journal edition. *The American Institute of Homeopathy online COVID-19 database will continue to be a vital and dynamic resource as we work together to once again document the power of homeopathy in its well prescribed use of homeopathic medicines.* There is much work still to be done. The data presented in this paper will hopefully assist in the understanding of the pathophysiology of this novel viral infection as it is understood today, recognizing that this is a rapidly evolving situation and there will undoubtedly continue to be a barrage of information to come. As Hahnemann reminds us in Paragraph 100 of the *Organon*: Use caution and do not blindly accept conjecture as a substitute for actual observation. Keen observation, precise case-taking and factual information regarding the disease must be the foundation for every prescription.

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Two Cases of a Flu-like Syndrome during the COVID-19 Pandemic

Irene Sebastian, MD, PhD, DHt

Abstract: Two men who developed sudden onset of a flu-like illness during the current COVID-19 pandemic were cured with homeopathic medications. Neither patient was tested. Different homeopathic medications were selected for each one based on the unique presentations of their illnesses. Both men reported that they felt better after treatment than they did prior to the illness.
Keywords: flu-like illness, COVID-19, *Belladonna atropa*, dyspnea, chest pain, headache, dizziness, myalgias, *Rhus toxicondendron*, shaking chills, back pain, joint pain, restlessness, acute and chronic conditions

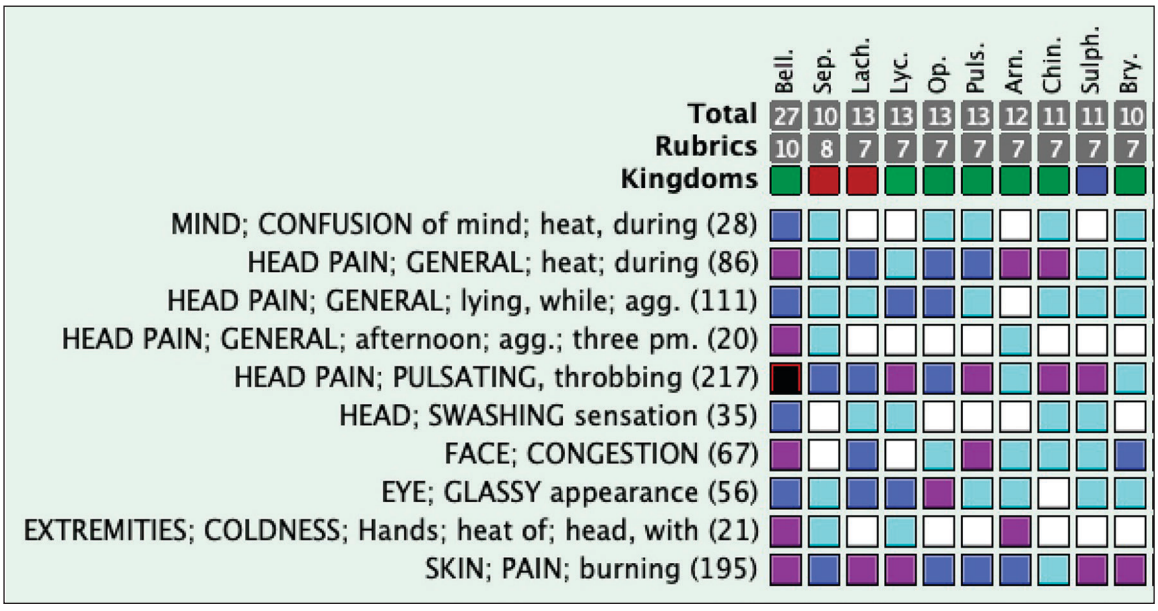
Case Vignette 1: A sixty-six-year-old man who traveled during the pandemic

D.W. and his wife attended a conference a couple of weeks prior to the onset of his symptoms, and two days after returning home he developed a 101.5 fever. He did not call me until the third day of the fever (March 18), at which time he felt very ill. The onset of fever was sudden, with a throbbing headache, worse at 3 p.m., and worse when lying down. His head felt as if the brain were "sloshing in water" and "on fire;" his scalp was hot and burning and very sensitive to touch. There was buzzing and humming in his ears, which was very bothersome to him. He also was experiencing shortness of breath and chest heaviness with a whistling cough, worse with inspiration. He had severe myalgia especially in his lower extremities but no joint or bone pains. He felt disoriented and dizzy. His wife reported that his face was flushed, right ear was red, right eye was inflamed, and both eyes were glassy (pupils were not dilated), and his hands and sometimes his feet were cold. There was poor appetite, no thirst, no specific cravings, and no perspiration.

D.W. had a previous history of oral lichen planus which resolved with the homeopathic medication *Lycopodium clavatum* in 2017 (with no relapses prior to this acute illness). According to his medical history he also had internal hemorrhoids.

Discussion: I recognized the pattern of acute illness as *Belladonna atropa* and did not repertorize the case, but have included a repertorization (below) of some characteristic symptoms for beginners. The characteristic symptom which really caught my attention was the sensation of his brain "*sloshing in water*." This was a very intense symptom which D.W. mentioned several times. Constantine Hering described this sensation as a "feeling in brain like the swashing of water." (Knerr, CB. *Repertory of Hering's Guiding Symptoms*, 1896.) I would have prescribed *Belladonna atropa* even without this characteristic symptom, but this emphasized to me the intensity of the disturbance of this patient's vital force.

Resolution: The patient only had access to *Belladonna atropa* 30C potency, and he took a couple of doses that evening.



There were sweats that night; on waking the following morning, his fever had decreased to 99.5, and his pain had resolved.

Congestion and headache had not fully resolved yet, so I advised him to continue taking *Belladonna atropa* 30C as needed throughout the day, which he did for approximately four days. (If he had a higher potency, the recovery presumably would have been more rapid.)

Soon after, he began to develop a relapse of oral lichen planus, so I prescribed *Lycopodium* 30C, one dose which was curative in a short time.

A few days later, D.W. called to say that he was having a significant amount of bright red bleeding after bowel movements due to his internal hemorrhoids. He had begun to have a hemorrhoidal flare during his travels prior to the onset of his acute illness. He reported that such flares were not infrequent due to the change in diet and routine. There was no pain or itching; the only symptom was the profuse bright red bleeding, and the small amount of blood loss caused some anxiety. Again, I did not repertorize this part of the case. I chose a homeopathic medicine which follows *Lycopodium clavatum* well (*Phosphorus* follows well *Lycopodium* in fourth degree in the Repertory) and which is known for profuse bright red bleeding, as well as some anxiety about health. I prescribed *Phosphorus* 30C daily until the bleeding resolved—he took the remedy for about one week.

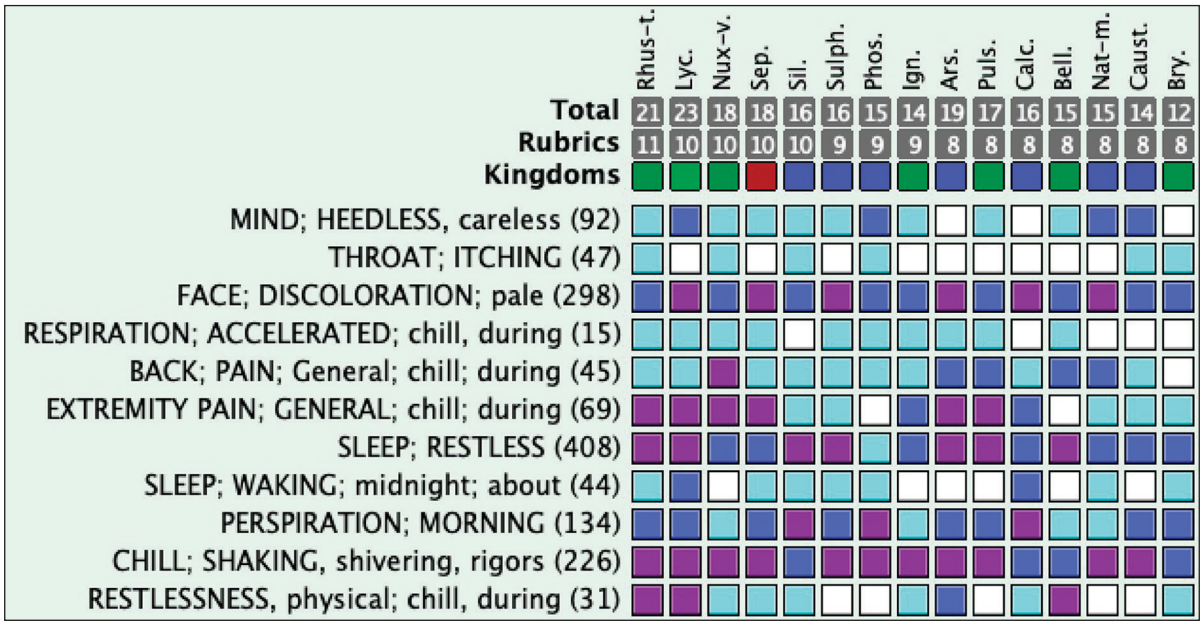
He has made a full recovery from this illness and continues to do well. When I called him at the time of writing this case (about six weeks after he became ill), he told me that he felt great—in fact, *better than prior to the illness.* He said that his metabolism had changed and that he had lost about 15 pounds despite having a better appetite and eating more food. There has been no relapse of the lichen planus or hemorrhoidal bleeding.

Case Vignette 2: A 45-year-old man with no concern about COVID-19

J.R. is a forty-five-year-old man who is in excellent health and has a very active lifestyle, including regular exercise, soccer, and jogging. He sought care from me on the morning of April 13, 2020.

He reported that he awakened around midnight with an itchy throat and a sensation that his throat was blocked; he got out of bed multiple times to drink water in an attempt to clear his throat, but nothing worked. He spent a restless night and awakened at four a.m. with the sudden onset of shaking chills. At 4:45 a.m., he began to feel "very sick" and "very strange"—*breathing heavily and rapidly as if he were sprinting and unable to control his breathing* despite using relaxation breathing techniques he had learned in yoga class. His face was pale at that time. Eventually, he was able to fall asleep again. On awaking three hours later, he felt feverish, was sweating profusely, and had intense achiness in his knees and back, similar to what he had experienced in the past when he suffered from herniated disks. His head felt very hot and he had a frontal headache. His wife reported that his eyes were glassy and face a bit flushed; pupils were not dilated and hands were not cold. He had no appetite but craved Gatorade or coconut water. There was no anxiety. During our initial telehealth consultation at 10 a.m., there was no apparent shortness of breath or cough. So, it appeared that his symptoms were worse during the night (after midnight). The sound and tone of his voice gave me the impression that he was very ill.

Resolution: I have treated J.R. successfully several times in the past with *Rhus toxicodendron* when he suffered from back pain due to herniated disks. He also has a strong sensitivity to poison ivy and *Rhus toxicodendron* has been curative dur-



ing previous poison ivy outbreaks. When he told me about his *restless night with the repeated need to get out of bed, the recurrence of back pains similar to what he had experienced in the past, the joint pains and the shaking chills*, it seemed to me that *Rhus toxidendron* would be curative of this acute flu-like illness, and I did not feel the need to repertorize the case. I prescribed *Rhus toxicodendron* 200C, one dose dry.

Because of his rapid uncontrollable respiration during the night, I called his wife 15 minutes after he took the first dose to see how he was doing. She reported that he had fallen asleep and I asked that he call me upon waking. Four hours later, he called to say, "I'm fine now." I asked what he meant, and he again said, "I'm fine…. all my symptoms are gone." He then added that though his back was somewhat stiff, this was typically present if he stayed in bed too long. Despite feeling well, he chose to spend most of the day in bed "to just make sure." When I called him a couple of weeks later (as I was writing this case report to make sure that all was well), he told me that in fact, *he felt better than he did prior to the illness*.

Discussion: Although I did not repertorize the case, I have attached a repertorization for beginners (on the foregoing page). Because he had told me that his back pain was similar to what he had felt in the past, I did not inquire after modalities; thus, the repertorization is not as specific as it would have been if I had taken the case for a new patient. Hearing that he had awakened at midnight and that he had gotten out of bed multiple times might make one consider *Arsenicum album*, but he lacked the anxiety so common with this remedy. (Please see E. B. Nash's "Leaders in Homeopathic Therapeutics" for an excellent discussion and differentiation of the "trio of restless remedies," *Aconitum napellus*, *Arsenicum album*, and *Rhus toxicodendron*.) After he had recovered, he admitted that he had ignored all the public precautions regarding prevention of COVID-19 and had lived his life as usual. (He continues to ignore all recommendations from public health officials about social distancing, wearing a mask, etc.) Hence, although he did not tell me this fact until after he was well, one might now include this symptom in the repertory rubric, "Mind, heedless, careless," which further illustrates the *Rhus toxicodendron* state.

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Suspected Case of Covid-19 in a 64-Year-Old Woman

Anje Troje, PhD

Abstract: A 64 year old woman developed symptomatic disease consistent with Covid-19 although testing was not available. Close follow up of the patient revealed the necessity for frequent repetition of the homeopathic medication even after improvement had set it in order to prevent relapse. Due to the severity of the symptoms and her age, it is quite probable that the severe form of Covid-19 was prevented by homeopathic treatment.
Keywords: Suspected COVID-19 case, *Arsenicum album,* posology, relapse, length of treatment to prevent severe Covid-19

Treatment Course: From March 19 until April 26th

March 19, 2020

A 64-year-old woman, a patient well-known to my clinic, contacted me with the following symptoms: She had a very sore and itchy throat for two weeks, only during the daytime, not at night. At the same time, there was a profuse runny nose, like a faucet, with lots of sneezing. There was a constant, dull headache over the right eyebrow that was tolerable. For the last week, she experienced intermittent, sudden, strong, shaking chills several times an hour. Her hands and feet felt ice cold then, so much so that she couldn't get warm, even in bed under several blankets. Chills occurred all day, but mostly midmorning and not during sleep.

She was neither feverish, nor sweaty, and did not measure her temperature. The chills made her very fatigued. She had had influenza in the past, but these chills were more violent and weakness even more extreme.

She also complained of diarrhea, several times a day, with very loose to watery stools with a "funny smell." There was a sudden urge and rumbling in the abdomen before the stool; this could happen any time during the day. She also experienced a sharp abdominal pain once or twice a day, which lasted but a few minutes, without clear modalities.

Her chest felt heavy, and as if she were not getting enough air; there was a slight cough at the beginning, but that had since abated.

Though her appetite was very low, she craved salty things which was unusual for her. She sipped on warm water frequently. The warm water soothed her throat for a while.

Sleep was not bad, but restless, and she awoke in the morning unrefreshed.

She also felt very anxious, worried that she might have caught COVID-19. Her family doctor also thought she had contracted COVID-19, but since there was no testing available for her, the doctor advised her to self-isolate. There was no recent travel history and no contact with any sick people. She had no known allergies.

Since her homeopathic knowledge was quite good, on her own she had tried several remedies: *Aconitum napellus, Bryonia alba, Gelsemium sempervirens,* and *Natrum muriaticum*. The remedies helped only marginally.

In the past, she consulted me mostly for recurrent UTIs, triggered by stress and grief. She had always been very anxious and presented with PTSD symptoms after several traumatic experiences. She responded well to homeopathic remedies, primarily *Sepia*, but occasionally *Cantharis, Natrium muriaticum, Aurum metallicum* and *Silicea*. She had been well for the last two years until this acute illness arose. (See the repertorization on the following page.)

Prescription: *Arsenicum album* 200C, 2 pellets dry that night, to be followed the next day by 2 more pellets in half a glass of water, a quarter teaspoon every 2 hours during the day.

March 21: Chills less severe, about 50% better. Weakness about 50% better. Stomach pain better. Sneezing and runny nose returned—clear liquid coryza. Also she was coughing more, with a little bit of phlegm, though easily expectorated. She was still extremely chilly. Headache unchanged. Less anxious, better sleep.

Evaluation: Good progress, more discharge was considered a sign of a positive immune response.

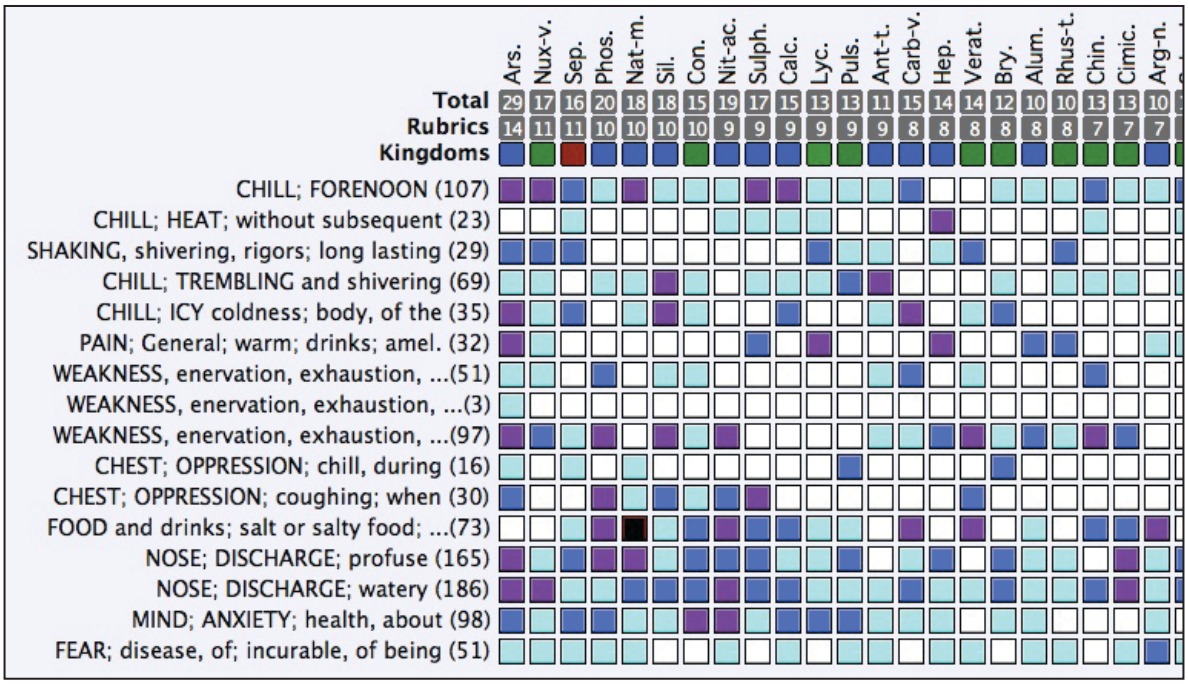
Prescription: Continue with *Arsenicum album* 200CH, diluted as before, now every 3 hours during the day.

March 23: She had felt good enough on March 22 to discontinue the remedy, but the next day she experienced a relapse. She emailed: "Sorry to bother you again, but I'm not feeling very good. Feel very weak, stomach upset, kind of chilly. Chills have returned full force. Not sure what it is, I took *Arsenicum* [*album*], one teaspoon right now. Feel panicky and anxious/afraid."

When I contacted her by phone she also complained about a severe headache that had improved a bit after a dose of *Belladonna* CH 200.

Prescription: Resume *Arsenicum album* 200CH, every hour for the rest of the day.

March 29: All the symptoms steadily subsided to minor



complaints only; she has discontinued *Arsenicum album* the day prior. In the morning the severe abdominal pain reappeared, with nausea and diarrhea. Chills returned; she felt very cold, nauseous, anxious and fatigued. No more headache, runny nose, cough. Breathing that morning was described as more "heavy."
Evaluation: Relapse after discontinuing the remedy. *Arsenicum album* still seemed to fit her symptoms well. (I have learned in the meantime from other colleagues that it is typical in Covid-19 infections for patients to relapse as soon as they discontinue the remedy.) *Prescription*: *Arsenicum album* 1M, 2 pellets diluted in half a cup of water, a quarter teaspoon every hour today, then in longer intervals if improving.

March 31: She emailed: "Not having stomach issues or chills, but having headaches the last few days; 3rd day now: pain on top of the head, and forehead feels heavy; bothered by noise or light. I'm also having problems with sleep; waking up at 3 a.m. with thoughts or feelings of fear or thinking about something I read in the news, and it takes me 2 hours or longer to get back to sleep; last night I took *Coffea cruda* 3 times."
Prescription: Take *Belladonna atropa* CH 200 once for the headache, otherwise continue *Arsenicum album* 1M, every 3 hours while awake. Avoid watching the news!

April 2: She reported feeling much better; mood was better too—no chills, diarrhea, but still occasional stomach pain. Breathing wa back to normal—no cough, no more coryza. Some postnasal drip. She still felt very chilly; needed 3 blankets at night. Energy was still somewhat reduced but getting better.

April 9, 2020: She reported feeling stronger, no more chills, no throat pain, but there was a feeling of a lump at the back of her throat. Diarrhea was better but had returned yesterday after eating to-go food (pizza and sandwich). Her stomach felt as if there werea rock in it.
Prescription: Continue with *Arsenicum album* 1M, twice a day until all the symptoms are gone, and then take it once a day for another week. Return to a diet of home-cooked vegetables and other light food.

April 24, 2020: Checking in: Energy was almost back to normal but sometimes fatigued in the afternoon. Symptoms had resolved since the second week of April except for an occasional loose stool. She had been taking the remedy once a day, and was afraid to stop it.

May 2: After discontinuing *Arsenicum album* on April 26, she has not had a relapse, and feels quite well.

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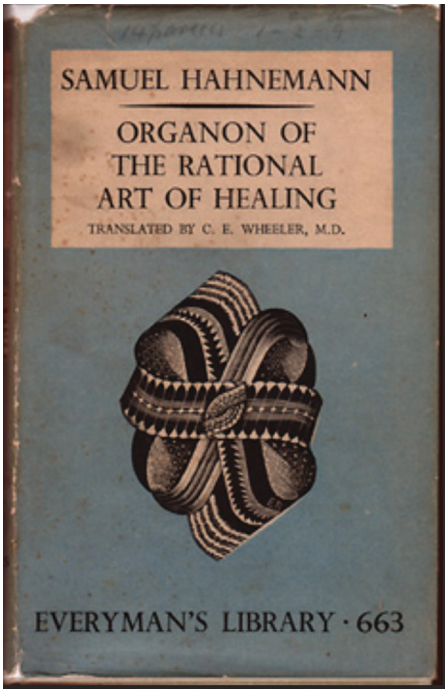
Hahnemann's Approach to Epidemics

Joel Shepperd, MD

Abstract: Hahnemann defines epidemics, describes how to investigate epidemics, and records examples of treatment for epidemics. His hard-earned experience should guide us in current times. We will also explore the difference between Hahnemann's concept of a "specific" remedy in epidemics vs. Rademacher's concept of genus epidemicus.
Keywords: epidemic, collective disease, specific remedy, genus of disease, genus epidemicus, Rademacher; Hahnemann, Samuel

The world now, May of 2020, is in a state of a pandemic. How should homeopaths approach treatment of their patients? In his time, Hahnemann also faced serious epidemic disease. He successfully treated epidemics with homeopathy and he has recorded his first-hand, practical experience so that other practitioners might help humanity. This paper will not cover the history of the use of homeopathy in epidemics after Hahnemann. The following numbers and statements in brackets are from the aphorisms in the *Organon*.



Define. The word epidemic means *epi-* upon, *demos-* people, from the Greek.[1] An epidemic disease imposes itself upon people. An epidemic disease is an acute disease, says Hahnemann. Acute diseases are defined as rapid, sick-making processes of the abnormally distuned life principle. They complete their course in moderate time, more or less. They happen to individuals; they are acute febrile conditions, and they are partly brought on by exposure to noxious influences. The exciting causes, for example, might be physical trauma, chilling, overheating, fatigue, wrong eating, overexertion, psychic upset, etc. [§72] The *causes* of acute febrile diseases in homeopathy are not limited to material pathogens as they are in biomedical allopathy.

Epidemic diseases are acute diseases that take hold of (*ergreifen*, grasp, grip, seize) many individuals with similar complaints in similar circumstances, and are due to a similar cause. They become infectious [*ansteckend*, tainted] and contagious (*contagiös*) in crowded areas. [§73] Epidemics cause fevers, each with its own characteristics; they last a limited time; they end in death or recovery if left to themselves, and some of the exciting causes may be war, flood, or famine. [§73]

What are the possible exciting causes of COVID-19? Maybe it is poverty, overcrowding, lack of sanitation or hygiene, or perhaps the exposure to animals unhealthy from unnatural handling, diet or loss of habitat. Contamination in food or air or water could be implicated. Could the effect of anger, fear or despair be involved due to unstable social/political situations? Here, you may add your own observations.

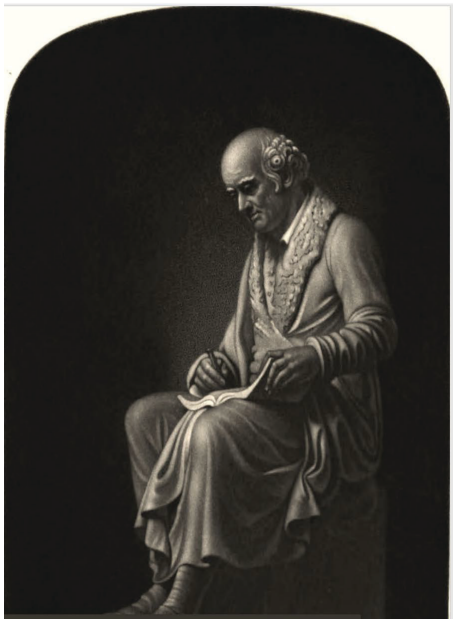
Some epidemic diseases recur in the same manner over the centuries and are given a traditional name, like measles, mumps, whooping cough, scarlet fever, typhus, cholera. But each recurring named epidemic disease differs greatly with each episode and should be treated differently each time. [§73, §73a, §81a, §81b]

Investigate. In the investigation of the symptom complex of epidemic diseases, it does not matter if the disease with that same name has appeared before. It is now new and unknown and must be explored in specific detail without conjecture, but with perspecuity. One will then find that the new contagion will deviate from all others, with few exceptions. [§100] The complete picture of the epidemic will not be seen from one case. An epidemic is a collective disease [*Collectivkrankheit*]. One can only perceive the full symptom complex and characteristics of the epidemic after careful investigation of several cases of patients with different bodily constitutions. [§102] The collective disease must first be an acute disease and an epidemic disease. It does not apply to chronic disease like AIDS, which has multiple forms and long-term sequelae. It does not apply to psychosocial imbalances like "corporate culture." Hahnemann's *Collectiv* does not translate to the modern American use of the word "collective" in politics, sociology or psychological terms such as "collective unconscious" or "collective consciousness."

Hahnemann never used the term "genus epidemicus." He speaks of finding the specific remedy. [102a] Historically, the phrase "genus of the disease" was used by some homeopaths. For instance, von Bönninghausen says, "…Allopathy, which first constructs for itself a frequently deceptive diagnosis of the disease, which at most only points out the genus of the disease."[2] And, "the former pathologies only sketch a scanty outline of the genus of the disease, but never the finer shadings

with the individuals which alone make the correct selection of the remedy suitable for the genus of every disease."[3] The genus, then, is a type or class of the disease.

It was J.G. Rademacher's influence that brought the phrase "genus epidemicus" into homeopathy. He was a younger contemporary (1772-1850) of Hahnemann who never accepted homeopathic axioms. He believed that a physical organ was the seat of disease, that medicine should have an affinity or similarity to the organ and that the genus of the disease is more important than the similarity to the totality of the symptom complex.[4] Says one homeopath in 1850, "We cheerfully coincide with Rademacher in his commendation of a thorough study of the genus epidemicus."[5] C.M. Boger comments, "That the acute illnesses bear the hallmark of time and place was Rademacher's idea of a genus epidemicus."[6] Matthew Wood states, "Both the homeopaths and eclectics adopted the genus epidemicus from Rademacher as well as the concept of the organ remedy."[7] C. Hering in 1859 reports on his experience with a diphtheria epidemic. "The medicine given has been mostly at first *Belladonna*. In some cases, *Bryonia* or *Antimonium crudum*, which last one corresponded to the genus epidemicus particularly well."[8] The term genus epidemicus seems, unfortunately, to imply one magic bullet cure for an epidemic disease. However, Hahnemann states that it is necessary to find the *specific remedy*: The complex of symptoms common to all patients points to the specific homeopathic remedy for the totality of the characteristic symptoms of the cases. [§241] Hahnemann gives examples from his experience about the reality of epidemic treatment.



Samuel Hahnemann

Experience. In the *Organon*, Hahnemann mentions that *Belladonna* could prevent scarlet fever if given early enough. [§33a] However, in one year, the epidemic named scarlet fever no longer responded to *Belladonna*, but required a different remedy.[9] In current times, the named pandemic, SARS CoV-2, will change much faster than that in one year and most likely require different remedies. The world has many more people now who travel much more often and contact those with many different constitutions and susceptibilities. The change of the need for different remedies could occur in the time frame of a few days.

Hahnemann writes of his experience in 1798 of an epidemic named influenza. He says, "Not only does it attack indiscriminately all individuals with chronic maladies, but it complicates itself with them and aggravates them. The presence of only a few of the symptoms of influenza lead us to recognize the existence of influenza, masked by these chronic maladies…. Only the specific for the influenza leads to success."[10] The symptom picture of the current coronavirus may often be mixed up with the chronic symptoms of each sick person. A large sample of people with symptoms may not yield that needed information. The homeopath should also know the chronic preexisting symptoms of each case before the epidemic symptoms began.

"A month after the termination of the epidemic, there was observed a chronic remission…"[11] This implies that many patients will not be well after the correct epidemic remedy. The chronic disease will worsen and need treatment. Aphorisms 240 and 241 explain that some people are not cured during an epidemic due to the underlying chronic disease. Complete cure occurs only if the chronic disease is treated homeopathically. In current times, how many people are not suffering from underlying chronic disease?

What would a potentized isopathic preparation of SARS Cov-2 do? In robust healthy people, it may help, but more often it could just aggravate. [§56a]

In 1814, Hahnemann reported on his treatment of Typhus. He found that it progressed in two stages. The first stage lasted two to four days only and responded to *Bryonia* or *Rhus toxicodendron*. The second stage required the remedy *Hyoscyamus*. Occasionally a third stage required sweet spirit of nitre.[12] This experience teaches us that serious epidemic fevers go through stages. Each stage often needs a different remedy.

The cholera epidemic of the 1830s also had different stages, each requiring different remedies. The first stage, before the diarrhea, was helped by *Camphora*. The second stage required *Cuprum metallicum* or *Veratrum album*. Later, some people also needed *Bryonia* or *Rhus toxicodendron*. Prevention (homeoprophylaxis) only worked with *Cuprum*. "Together with good and moderate diet and proper cleanliness, those in health should take, once every week, a small globule of *Cuprum* X, but this should not be done until the cholera is in the locality itself."[13] "Camphor cannot prevent those in health from cholera. It may worsen the disease and must be avoided."[14] The possible lessons from this experience are that prevention by medicine only works if exactly the right remedy is given at the right time determined by the known incubation and contagious timings of that specific epidemic.

Heal. In homeopathy we observe the primary action and the secondary reaction in the process of disease in a living organism. [§63] The first action is the energy of disease imposed on the organism. The thought of getting COVID-19 has resulted in fear, xenophobia, and feelings of no escape. The secondary healing insight of the conscious life principle results in the realization that in fact tribal or national borders are artificial and temporary. *There are no strangers. We are all one family in this together.*

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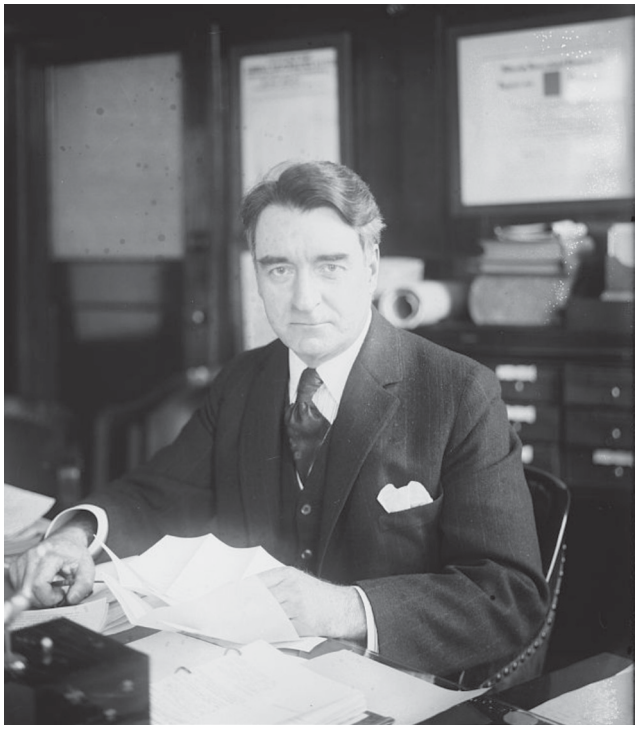
Homeopathy Was His Mission

Richard Moskowitz, MD, DHt

At this juncture in our embattled history, with Big Pharma mounting a global crusade against homeopathy, it seems especially fitting to pay tribute to a real-life homeopathic physician who bested the drug industry at its own game. I refer of course to Royal Copeland, M.D. (1868-1938), a homeopathic physician and U.S. Senator, who wrote and secured the passage of the Food, Drug, and Cosmetic Act of 1938, which officially standardized the preparation and labeling of homeopathic medicines, and thereby authorized licensed physicians to use them in our practices, an achievement to which our continuing membership in the medical profession is closely tied.



Dyed-in-the-wool classicists like myself are still excessively prone to turning up our noses at "low-potency men" prescribing on keynote and pathological indications, without bothering to use the Repertory, like the "half-homeopaths" that Hahnemann never tired of railing against. Speaking for myself, I've always clung to the single remedy and the totality of symptoms as a veritable life-preserver, rescuing me from every medical indoctrination that I couldn't accept, and even entitling me to an arrogant smugness as the bearer of superior truths, to justify my voluntary exile from the profession to which, in our present predicament, we would do well to try to rejoin with as much good faith and humility as we can muster.

Dr. Copeland was an ophthalmologist, who like many surgical subspecialists of his time used remedies mostly for pre- and post-op care, as well as for the injuries and common acute ailments of general and emergency medicine, rather like our CEDH colleagues today. Nothing wrong with that, surely. What he taught, what he stood for, and what now in our extremity we most urgently need to learn from him, is how to advocate for homeopathy not as an alternative or rival sect, but rather as a subspecialty within medicine, differing from our orthodox brethren mainly in our exotic method of treatment, and also honoring the best that our non-homeopathic colleagues have to offer, as he did. Justly celebrated for his skill as a surgeon and his openness to trying new techniques, he earned newspaper headlines such as "Eyeball Slashed, His Eyesight Saved," and "Cornea Grafting," a procedure he may well have been among the first to actually attempt in a patient.

In any case, what is most extraordinary about his career and also sets him apart as a person is his missionary zeal for and tireless devotion to advancing the cause of homeopathy in medicine, and his unmatched success in doing so, in the teeth of active opposition from his allopathic colleagues and the pharmaceutical industry, and indeed to an extent that we who remain in his debt have never even come close to. No less than the purest and strictest of us, he regarded the Law of Similars as "one of the great laws of nature, as fixed as the law of gravitation."

As I review the details of his biography, what strikes me most of all is his unique intermingling of political and religious ambitions, already fully manifest in him as a young man fresh out of school, that continued to motivate him for the whole of his life.[1] Born and raised in Michigan, he graduated in 1889 from the Homeopathic Medical College affiliated with the University of Michigan in Ann Arbor, and taught in the Eye and ENT departments there for several years after that. By 1891, at just 23 years of age, he was already President of the local Homeopathic Society, and then "graduated" to lead the 1400-member Michigan Homeopathic Medical Society only a few years after that, reminding the assemblage in his Presidential address that homeopathy had "much missionary labor to perform!"

In 1892, after joining the GOP to help re-elect President Grover Cleveland, he also served on the town Board of Pension Examiners, which provided free medical care for indigent patients, not to mention speaking out against the ugly anti-Catholic sentiment that was rampant, even among his Methodist co-religionists, and later becoming President of the local Methodist League. The religious language and devotional spirit

that always animated his work led many who knew him to imagine a career in the ministry.

At the turn of the century, his many duties and honors included:

1900: Chairman, American Institute of Homeopathy-Eye and Ear division;
1901: Mayor of Ann Arbor (until 1903);
1904: President, American Homeopathic Ophthalmological, Otological & Laryngological Society (1904);
1907: President, American Institute of Homeopathy;
1907: Ann Arbor Parks Commissioner;
1907: Ann Arbor Board of Education, Board of Tuberculosis.

Then, as always, he found ways to pursue his political and medical careers side by side, if not interchangeably.

Enacted in 1906, the Pure Food and Drug Act required for the first time that all dangerous and addictive drugs be accurately labeled, prohibited interstate commerce in adulterated or mislabeled drugs, and recognized the United States Pharmacopoeia and the National Formulary as official standards for the preparation and labeling of medicines. But, characteristically, the Homeopathic Pharmacopoeia was left out. From that moment on, winning official acceptance of our remedies became the main focus of both his careers, and the overriding mission of his life.

In 1908, seeking a wider audience than a small college town could offer, he left Michigan to become Dean of the New York Homeopathic Medical College and its clinical affiliate, Flower Hospital, both of which he led capably for the next ten years. His main challenge was the Flexner Report of 1910, which ruled that the training offered by the twenty homeopathic medical colleges was substandard; and within the next eight years, all but six of them had closed down. In spite of two unfavorable ratings by AMA inspectors, he kept his school open, aided by the City Commissioner of Education, who rated its curriculum more highly than the AMA's own standards. The College remained open until 1938, one of only two that did so.

During his deanship, he also began making headlines that praised his surgical skill, and became even more widely known for using homeopathy in his practice. In 1913, he was named a Fellow of the prestigious American College of Surgeons, a high honor for any physician, but virtually out of reach for most homeopaths. When America entered World War I, he helped establish U.S. General Hospital #5, the first-ever medical facility for homeopathic care of our military in wartime, which gave homeopathic medicine official recognition that was long overdue, in the teeth of considerable opposition from skeptical officials and a string of similar but failed attempts dating back to the Civil War.

In 1918, he resigned his academic position to become the New York City Health Commissioner, in which capacity he served with great distinction, improving sanitary conditions and even lowering infant mortality, even and especially during the Spanish flu pandemic, when the hospitals under his supervision favored homeopathic treatment and boasted some of the lowest death rates in the country, an achievement which nevertheless remained unpublicized in the mainstream press. In 1920, however, he was belatedly invited to write regular, weekly columns for a newspaper chain, another pioneering idea that he welcomed with enthusiasm, saying "It's time to do away with the mystery of medicine," and kept going until his death, achieving a readership of 11,000,000, generating 10,000 letters a week, and culminating in The Health Book, a popular collection of his offerings.

In 1922, he ran successfully for U.S. Senator, this time as a Democrat, with Roosevelt (FDR) as his honorary campaign manager, and was re-elected twice more, holding the seat until his death in 1938. As Chairman of the Rules and Commerce Committees, he helped with legislation in many areas; but health promotion was always what he cared about most deeply and worked for without letup. When several promising bills that he co-sponsored died or went nowhere, he devoted himself single-mindedly to including the Homeopathic Pharmacopoeia of the U.S. (H.P.U.S.) under the umbrella of the old Pure Food and Drug Act, thus securing both official recognition for our remedies and our right as physicians to prescribe them. After years of dead ends, active opposition by the drug industry, many sleepless nights, and unremitting persistence, the law that he wrote finally won passage through Congress and was enacted in 1938; and it is a fitting testament to and measure of his devotion that he died just four days afterward.[2]

1. When I agreed to pay tribute to Dr. Copeland, I knew very little about him, other than two brief mentions in Julian Winston's The Faces of Homeopathy and Dana Ullman's The Homeopathic Revolution. Another source I consulted was the account in Wikipedia. But for biographical details I relied mostly on a splendid article by Jonathan Davidson, M.D., a psychiatrist at Duke University and member of the UK Faculty of Homeopathy, and Flavio Dantas, M.D., Professor of Homeopathy and Clinical Medicine at the Medical School of the Federal University of Uberlandia, Brazil. It was published in Pharos, the Journal of Alpha Omega Alpha, the medical honor society, in the summer of 2008, and, interestingly enough, given my exhortation, is listed in PubMed.

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About the Author: Richard Moskowitz, MD, practiced classical homeopathy in Watertown, Massachusetts (Boston area). He previously served as President of the NCH and taught at their Summer School. He is the author of the books "Homeopathic Medicines for Pregnancy and Childbirth", "Resonance:The Homeopathic Point of View," "Plain Doctoring: Selected Writings, 1983-2013," and "More Doctoring: Selected Writings, Volume 2, 1977-2014."

Editorial on Dr. Rutten's Article: Statistics and Homeopathy

Todd Hoover, MD, DHt

In the article, "Experience and Science: Bayes' Theorem," Dr. Lex Rutten gives us a quick snapshot of his years of experience applying Bayesian statistics to the field of homeopathic prescribing. If you are unfamiliar with this statistical approach, I suggest you consider taking this opportunity to educate yourself on the method as it is very applicable to what we do in homeopathy every day. Dr. Rutten gives us a scenario of how we already use the method in conventional diagnosis. When we put together cough, fever, pleuritic chest pain, and purulent sputum developing over the preceding week, we rapidly arrive at a fairly high probability or likelihood that our patient has pneumonia or bronchitis. A good auscultation should rapidly confirm our suspicions.

Allopathic or conventional medical diagnostic systems are useful in defining constellations of symptoms that occur in our patients that often have congruent etiologies and pathologies. By grouping patients in this manner (a reductionistic approach), we can use this "diagnosis" to evaluate treatments to see if they are better than placebo. This works well when the diagnosis is extremely homogenous, such as in cases of Streptococcal pharyngitis for example, but it completely breaks down when the diagnosis is heterogenous, like hypertension, depression, or even the current pandemic of Covid-19 cases. In such cases, the treatment becomes an algorithm rather than a this-for-that scenario. Individualization of therapy becomes the best course. And we homeopaths are the true masters of this art.

Dr. Rutten then gives us a lengthy explanation of how we can evaluate single symptoms or signs as "predictors" or "prognostic factors" for outcomes. In this way, instead of a limited concept of diagnosis that we hope is uniquely linked to a treatment that results in a favorable prognosis, we can use our predictors to determine which therapeutic choices are related to a positive outcome. Bayesian statistics formalizes or systematizes the exact technique deployed by every homeopathic practitioner for the past two hundred years. How likely is the symptom constellation of fever + cough + purulent sputum + pleuritic chest pain + right lower lobe rales to predict that my selection of *Belladonna* is going to cure this patient?

Dr. Rutten brings this approach together with an important conclusion for all homeopathic prescribers. Bayesian statistics offers us the possibility of building much more accurate repertories for the future. Instead of plain text, bold italic, bold, or bold underline, we can imagine a repertory where each remedy in each rubric will be assigned a likelihood ratio. A likelihood ratio less than 1 tells us that the remedy in that rubric is not predictive (less likely to be associated with improvement), while greater than 1 is predictive that the remedy will likely be associated with an improvement in the symptom. The higher the number, the higher the likelihood (two being twice as likely and so forth). When we combine several of these likelihood ratios for a remedy within various rubrics, the analysis will result in a prediction percentage—this remedy is 90.4% likely to cure the patient, while the next remedy may only be 78.6% likely. And the precision can increase as more and more cases are progressively added to the databases.

While Bayesian statistics are not well suited to demonstrate the efficacy or effectiveness, they are a perfect tool to help us become more accurate prescribers. For this reason, we should all become interested in what Bayes created. If you wish to learn more about how the system works, I suggest you look for any of Dr. Rutten's prior articles to get a sense of the applicability and science. In addition, it is helpful to become aware of the effects of confirmation bias, which can succinctly be described as the tendency of a homeopath to go up a certain ladder as soon as a characteristic symptom is detected. "Oh, throbbing headache? Does your face ever get flushed? Do you have cramping anywhere? Let me look at your pupils." The work being done here helps remove our bad habits as well. Kudos to Dr. Rutten for his tireless work in this domain. I hope the outcomes of the current work with Covid-19 results in many more lives saved using homeopathy.

About the author: Todd A. Hoover, MD, has practiced homeopathic medicine and occupational medicine for over thirty years. He has served as President of the American Institute of Homeopathy, President of the Council on Homeopathic Education, U.S. representative to the LMHI, and is currently a Trustee for the Homeopathic Pharmacopeia Convention of the U.S. For the past six years, Dr. Hoover has turned his sights to the study of Yoga, completing his Bachelor's degree in India and now enrolling in a Master's degree program.

Experience and Science: Bayes' Theorem

Lex Rutten, MD

Abstract: Science is often regarded as a process of falsifying hypotheses. That is not always possible, and as is the case in medicine, is commonly undermined by uncertainty, as is the case in the recent COVID-19 epidemic. Medicine is also based on learning from experience, and this is much more scientific than many people think. Learning from experience can be described by a mathematical formula: Bayes' theorem. Homeopathy is particularly well suited to the application of Bayes' theorem. This requires a collection of successful cases and counting of symptoms. This paper demonstrates how this works in actual homeopathic practice. Applying Bayes' theorem, we achieve better discrimination among medications, even when using relatively common symptoms. Homeopathic practitioners are indispensable to the scientific development of homeopathy and need to develop some skills to participate in prognostic factor research.
Keywords: COVID-19, conventional frequentist statistics, Bayes' theorem, posterior odds, prior odds, likelihood ratio, prognostic factor research (PFR)

Introduction

Currently the world is being challenged by a pandemic which reminds us of the influenza pandemic of 1918, so-called 'Spanish flu.' Homeopathic practitioners know, especially in the US, how successful homeopathy had been in treating this flu. Now, we have the COVID-19 pandemic, and many billions of dollars are spent on scientific research to find a solution. It appears that COVID-19 has several different clinical presentations, and this is also a challenge for homeopathy because possibly different homeopathic medications fit these different presentations. Can we rely on past experience or should we collect new knowledge from our experience in treating the present epidemic? Homeopathic practitioners generally underestimate the scientific power of experience, mostly because of insufficient knowledge of science and statistics.

What is 'Scientific'?

Generally, conventional medical treatments are regarded as 'scientific' while complementary/alternative medicine (CAM) is not recognized as such. Roughly spoken, the difference between conventional medicine and CAM is the orthodox consensus that though we understand how conventional medicine works (plausibility), this is not the case for most CAM methods, including acupuncture and homeopathy. These methods are based on experience: if a patient with pneumonia has other symptoms like cough, headache from cough, rapid breathing, fever with delirium and grinding teeth during sleep, an experienced homeopathic doctor will immediately think of the homeopathic medicine *Belladonna atropa*. This knowledge is based on experience from hundreds of thousands of doctors in the past and is still relevant. On the conventional medicine side, we have antibiotics, and orthodox doctors will prescribe antibiotics in the case of pneumonia. This is plausible therapy, but unfortunately, due to antimicrobial resistance (AMR) we meet an increasing number of patients not responding to antibiotics.[1] The patients who fail to respond to such treatment due to increasing rates of AMR could be saved by homeopathy, despite its apparent lack of plausibility.[2]

Apart from plausibility, conventional medicine is regarded as 'scientific' because it is thought to be scientifically proven by randomized clinical trial (RCT), while homeopathy is thought to not have such evidence. This is not true, and it reflects serious misunderstanding about science.[3] Such misunderstanding is also reflected in two different statistical methods: classical (frequentist) statistics and Bayesian statistics.

The Difference between Frequentist Statistics and Bayes' Approach

Frequentist statistics are employed to evaluate a hypothesis: is it wrong or not. Conventional understanding would suggest that the confirmation of a hypothesis would be a worthy pursuit; however, and awkwardly, the philosopher Popper made it clear that we can only falsify hypotheses: "No number of sightings of white swans can prove the theory that all swans are white. The sighting of just one black one may disprove it."[4] However, in medicine there is no such thing as black or white, 'true' or 'not-true;' no medication can be said to work always. Frequentist statisticians found a rather peculiar solution for this problem: if the statistical probability that a medicine works the same as placebo is less than 5%, the medication can be considered not to be a placebo—so, it 'works.' If this chance is 6%, it's considered not to work. And if the hypothesis is tested for one specific indication, the medicine is considered to work only for this indication and not for other indications.

Our intuition tells us that something is wrong here. When is a doctor sure about anything? Let's take the example of a diagnosis; this is always a probability: possibly 1%, possibly 99%, mostly somewhere in between. Furthermore, a diagnosis is rarely based on one symptom or test, but a diagnosis as a whole is the only variable tested in RCT. The evidence needed to make a diagnosis of pneumonia gradually builds up when the doctor notices several subsequent symptoms—such as dyspnea and rapid respiration—and becomes more certain of the diagnosis after every new observation. Then he obtains some laboratory studies and X-rays to become sure enough to act to prevent harm to the patient. However, the diagnosis in the end is still a probability, see Figure 1.

Diagnosis: pneumonia (conventional medicine)		Prognosis: chance Belladonna will work (homeopathy)	
Symptoms/signs:	chance:	Symptoms/signs:	chance:
• Fever	5%	• Cough	10%
• Cough	10%	• Fever with delirium	25%
• **Rapid breathing**	25%	• Rapid breathing	40%
• Shortness of breath	35%	• Headache from cough	50%
• Examination / **CRP**	70%	• **Grinding teeth in sleep**	**80%**

Figure 1: The diagnostic process (left) and the prognostic process in homeopathy (right). Probability rises step-by-step with every new available information (signs and symptoms).

Looking at the way a diagnosis is made, the homeopathic practitioner also immediately recognizes the way a homeopathic medicine is selected, based on a step-by-step process of increased probability. The processes in conventional diagnostics and homeopathic medicine selection are the same, but with different names: diagnosis and prognosis respectively.

Every doctor will agree that medicine is about probabilities, not certainties. Even a medication that has been "proven to be efficacious" will not work in every patient. We can conclude that 'scientific' proof that a medicine works is an artificial way of declaring medicine to be 'scientific'—the so-called 'scientific certainty' is, in fact, a probability.

But, why should a probability not be considered scientific? This discussion is older than our discourses about homeopathy, because there is another older statistical method, Bayesian statistics, that deals with probabilities . . . instead of truth. Bayesian statistics has long been regarded as 'unscientific' by conventional (frequentist) statisticians.[5] Bayesian statistical analysis was forbidden for a long time in mainstream statistics, but this proved to be impractical—you cannot calculate an insurance premium or establish a diagnosis without Bayesian statistics.

Bayes' Theorem

Reverend Thomas Bayes (1702-1761) based his theorem on the law of conditional probability and it is explicitly or implicitly used to update prior beliefs in a particular hypothesis after observations or experiments.[6] *Conditional probability* also governs card-playing: we know the contents of a deck of cards and the contents will change every time a card is drawn. Card-playing is a skill based on knowledge and observation. The card player, however, is still dependent on chance —the cards he receives—because he is on his own. His ability to control the risk is limited by his small sample size of one person. Owning a casino, on the other hand, involves no risk because chance will be exactly known due to the large numbers involved. This is hard scientific knowledge.

Conditional probability is also present in medical diagnostic reasoning.[7] For instance, in a healthy young man with cough and without fever, we usually do not consider pneumonia. If the patient has fever, the chance of having pneumonia increases; the card 'fever' is already on the table. And if he also has rapid breathing, chance increases still more, and so on.

Bayes'

We see that different pieces of information increase the chance of a particular diagnosis in a stepwise fashion. The chance of the diagnosis of pneumonia *before* we have one piece of information (like cough) is called the *prior chance* or the chance that anyone might have pneumonia. After we receive that information 'cough' we obtain the *posterior* chance of pneumonia, which raises the probability of 'pneumonia' in this case. The *posterior* chance after 'cough' becomes the *prior* chance (the chance that anyone with cough might have pneumonia) before the next information (fever). If the patient also does have a fever, the *posterior* chance that this coughing and febrile patient has pneumonia is again slightly raised. The same goes for 'rapid breathing,' or any other piece of information that might be associated with an increased chance for pneumonia.

Homeopathy is also based on knowledge and observation. Homeopathic doctors have noticed that the symptom 'grinding teeth during sleep' occurs more frequently in patients responding well to *Belladonna atropa* than in other patients. This is comparable to the knowledge that patients with pneumonia often have rapid breathing, more often than patients without pneumonia. So, the prognosis of the patient with 'grinding teeth during sleep' as well as the diagnosis of the patient with fever are influenced by the fact that these symptoms occur more frequently in patients responding well to patients with pneumonia or *Belladonna atropa*, respectively. In other words: experience from the past is useful for diagnosing and curing new patients.

The addition 'more than in other patients' in our examples of fever and 'grinding teeth during sleep' is a crucial element in Bayes theorem. This theorem has several expressions, one of them is:

Posterior odds = LR * prior odds

LR = Likelihood Ratio = prevalence in target population / prevalence in remainder of the population; e.g., the prevalence of 'grinding teeth during sleep' in the population responding well to *Belladonna atropa* divided by the prevalence of 'grinding teeth during sleep' in the remainder of the population.

Odds = chance / (1-chance); chance = odds / (1+odds). The Likelihood Ratio (LR) is always larger than zero. If LR > 1, the posterior odds increase; if LR < 1 (>0) the posterior odds decrease.

Learning from Experience: Prognostic Factor Research

The essence of learning from experience is comparing one experience with other experiences. You noticed that rapid breathing occurs more frequently in patients with pneumonia, more frequently than in the average patient. If you would count this symptom in all your patients, you might find that it occurs twice as frequently in pneumonia patients as in other patients. This is precisely the meaning of likelihood ratio: LR of

'rapid breathing' for pneumonia is 2, or that 'rapid breathing' is two times more likely in the patients with pneumonia than in other patients.

Counting is the magic word here. We can do the same with symptoms from a homeopathic evaluation. We actually did do a study counting the symptom 'grinding teeth during sleep' in 4,094 consecutive new patients in 10 Dutch practices and found 219 of them had this symptom.[8] After a treatment period of at least 6 months, it appeared that 21 patients had a good response to *Belladonna* treatment. In this '*Belladonna* population' six had 'grinding teeth during sleep,' With this information we can calculate the LR after putting all relevant numbers in a so-called 2x2 table (see Table 1).

	Belladonna pop.	Remainder pop.	
grinding teeth present	6	213	219
grinding teeth absent	15	3860	3875
Total	21	4073	4094

Table 1

LR can now be calculated as LR = (prevalence in *Belladonna* population) / (prevalence in the remainder of the population) = (6/21) / (213/4073) = 5.46. Meaning: the symptom 'grinding teeth during sleep' occurs 5.46 times more frequently in the *Belladonna* population than in the remainder of the population.

The process described above is prognostic factor research (PFR) and is becoming more important in conventional medicine because of growing awareness that medicines should not be prescribed on diagnosis alone.[9] Shouldn't we be relying on research and on our experience of outcomes for patients who presented in similar ways in the past?

Predicting Results

Bayes' formula allows us to predict success. Of course, we have to translate chance into odds and back, but this can be done by computer. First, we have to estimate a prior chance that *Belladonna* works. Let's assume that this estimate is 50%, based on our clinical estimate that the symptoms 'cough,' 'fever with delirium,' 'rapid breathing' and 'headache from cough' are enough for about 50% chance of success, and odds = 1. The posterior odds knowing the patient has 'grinding teeth during sleep' becomes LR x Prior odds = 5.46. This equals chance = 5.46 / (1+5.46) = 80%, like in Figure 1.

If you ask 10 experienced homeopaths about their expectation of a chance of success with *Belladonna* if the patient has 'grinding teeth during sleep,' the answer would vary greatly, partly because of different experiences, and partly because they did not compare their cases and count symptoms. After counting in 10 practices and combining results, the estimate is much more certain.

Is this procedure less scientific than an RCT? That depends on how you define 'scientific.' If you define 'scientific' as 'being 95% sure that the effect of the medication is not due to placebo effect' our 'prognostic factor research' (PFR) finding LR = 5.46 for 'grinding teeth during sleep' and *Belladonna* is indeed less scientific. However, will the practitioner or the patient think so? The outcome of an RCT says nothing about the effect on the individual patient and is restricted to all kinds of limitations regarding patients for whom the outcome is valid. With PFR and Bayes' theorem, the homeopathic practitioner will be able to predict the results of treatment for each individual patient as long as we know the prior chance of an effect of homeopathy and LRs of all the symptoms of the patient.

Homeopathic Repertory and Statistics

The problem of the present homeopathic repertory is its reliability. Every homeopath knows that frequently used medicines nearly always come up in larger symptom rubrics. Let us look at the repertory rubrics concerning the four most frequently occurring COVID-19 symptoms (see Figure 2 on the next page).

In this epidemic homeopathic medications like *Arsenicum album (Ars.)*, *Phosphorus (Phos.)* and *Bryonia alba (Bry.)* were used with good results, but also *Gelsemium sempervirens (Gels.)*, which does not show up in the repertorization in Figure 2, or *Camphora (Camph.)*. With the present repertory at hand, the most prominent COVID-19 symptoms do not give much of a foundation for treatment.

The most fundamental problem of the homeopathic repertory is that entries are based on absolute occurrence of symptoms in provings and successful cases, not on systematic counting. Only if we count symptoms systematically can we calculate the prevalence of symptoms in the whole population and in the specific medication populations. This renders LR values, so we can apply Bayesian statistics.

Collecting Cases for Counting

Before we can count symptoms we have to collect case descriptions, preferably in a reproducible electronic format. The description of the symptoms could look like Box 1 (below), still highly unformatted.

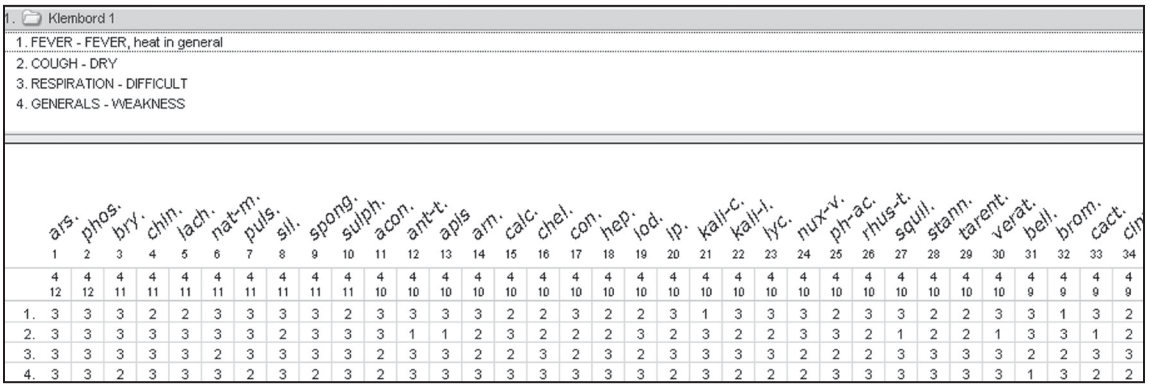
It is obvious that there will be much variation between various case descriptions. Semantics can be different from case to case; the symptom 'fatigue' can also be expressed as 'weakness,' 'tiredness,' 'prostration,' 'exhaustion,' etc. To enable counting of symptoms we have to structure and format all cases. Figure 3 shows how this formatting has been done for the symptom exhaustion/fatigue/weakness/tiredness/prostration (page 37).

After formatting we can count occurrences of the symptoms. We used the word 'fatigue' instead of 'prostration,' not referring to the repertory rubric 'MIND: PROSTRATION,' but to the symptom we frequently see in COVID-19 patients. The counting of four COVID-19 symptoms is shown in Table 2 (page 37).

In the homeopathic repertory we would see bold entries for all three medicines in each rubric, but no distinction

Box·1:·Description·of·Symptoms·in·a·COVID-19·Case↵

Bitter·taste·in·the·mouth,·on·the·sides·of·the·tongue.·Feeling·of·pressure·on·the·chest.· Headache.·Fear·of·drowning.·Fatigue.·Muscle·pains.·Conjunctivitis.·No·fear·of·death.· Evening·deterioration.·Shortness·of·breath,·sensation·as·if·rib·cage·does·not·stretch.· Fear·of·death.·Dry·cough.·Fever.¶



1. Klembord 1

1. FEVER - FEVER, heat in general
2. COUGH - DRY
3. RESPIRATION - DIFFICULT
4. GENERALS - WEAKNESS

	ars.	phos.	bry.	chin.	lach.	nat-m.	puls.	sil.	spong.	sulph.	acon.	ant-t.	apis	arn.	calc.	chel.	con.	hep.	iod.	ip.	kali-c.	kali-i.	lyc.	nux-v.	ph-ac.	rhus-t.	squil.	stann.	tarent.	verat.	bell.	brom.	cact.	cin
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	4/12	4/12	4/11	4/11	4/11	4/11	4/11	4/11	4/11	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/10	4/9	4/9	4/9	4/9
1.	3	3	3	2	2	3	3	3	3	2	3	3	3	3	2	2	3	2	2	3	1	3	3	3	2	3	3	2	2	3	3	1	3	2
2.	3	3	3	3	3	3	3	2	3	3	3	1	1	2	3	2	2	2	3	2	3	2	2	3	3	2	1	2	2	1	3	3	1	2
3.	3	3	3	3	3	2	3	3	3	3	2	3	3	2	2	3	2	3	2	3	3	3	3	2	2	2	3	3	3	3	2	2	3	3
4.	3	3	2	3	3	3	2	3	2	3	2	3	3	3	3	3	3	3	3	2	3	2	2	2	3	3	3	3	3	3	1	3	2	2

Figure 2: Repertorization of four symptoms of COVID-19 illness

	A	B	C	D	E	F	G
1	Medicine	Symptom 1	Symptom 2	Symptom 3	symptom 4	symptom 5	symptom 6
16	gels	prostration	heaviness eyelids	no thirst	no myalgia, or perspiration	Headache as 'being tied by a band around the head'	Cough aggravated the headache
17	gels	prostration	heaviness eyelids	Increased thirst	No fever but prominent chilliness	chilliness mainly felt over the back first, then to the extremities.	Generally ameliorated from perspiration and warmth
18	gels	prostration	chill	Low appetite with no thirst	chilliness mainly felt over the back	Cough associated with tickling at the throat	Sneezing with moderate amount of burning discharge
19	gels	prostration	heaviness eyelids	No thirst during chills	No fever but much chilliness, felt that the chilliness ran up and down the spine	Progressively worsening headache from the L sided nape radiating to L eyebrow	Headache ameliorated after profuse urination
20	gels	prostration	heaviness eyelids	No thirst during chills	No fever but worsening chilliness with headache	Chilliness ran up and down of the spine	Generally aggravated by the cold and wet weather
21	gels	prostration	Involuntary urination during cough	pain from the nape of the neck radiating to the head	Cough was dry most of the time except on waking	headache as 'constricting with a band'	Constrictive tightness at the chest
22	gels	prostration	heaviness eyelids	Involuntary urination during cough	The cough was dry most of the time except on waking	Cough with pain in chest, tickling in chest	Dry cough aggravated at night
23	gels	prostration	heaviness eyelids	Involuntary urination during cough	The cough was dry most of the time	Cough with pain in chest, tickling in chest	Generally aggravated from wet and cold weather
24	gels	chill	joint pain	no thirst			

Figure 3: Print screen of a spreadsheet showing symptoms of 9 patients treated successfully with Gelsemium (Gels). The 'prostration' in the first column has later been formatted to 'fatigue.'

	Total	Ars	Bry	Gels
n =	161	21	45	25
fatigue	**87 (54%)**	11 (52%)	20 (44%)	20 (80%)
dry cough	**73 (45%)**	8 (38%)	26 (58%)	10 (40%)
dyspnea	**51 (32%)**	5 (24%)	18 (40%)	4 (16%)
headache	**48 (30%)**	6 (29%)	17 (38%)	9 (36%)

Table 2: Counting the presence (frequency) of four COVID-19 symptoms in a population of 161 patients responding well to homeopathy; 21 to Arsenicum album (Ars.), 45 to Bryonia (Bry.) and 25 to Gelsemium sempervirens(Gels.).

between the medicines. Just counting does not help either, because *Bryonia alba* is used twice as often as *Arsenicum album*. However, when we calculate frequencies, we start seeing differences between medications: 'prostration' is clearly seen *more frequently* in cases responding well to *Gelsemium* than to *Bryonia*, which is less apparent when looking at the absolute numbers.

The purpose of repertorization is to show what medicines are indicated by specific symptoms, as an index to the materia medica. From the numbers in Table 2 we can calculate LR, (prevalence in the medicine population)/(prevalence in the remainder of the population). LR > 1 indicates that the chance that the medication will work increases if the symptom is present, if LR < 1, this chance decreases. The LR values are shown in Table 3 (on following page).

The LR values in Table 3 (papge 38) are not much above unity (value of 1) and therefore no strong indication for any of the respective medications, which is expected because these are rather common symptoms in COVID-19 cases. An experienced homeopathic practitioner looks at the totality of the patient and discovers more peculiar symptoms, like the restlessness of the *Arsenicum album* patient and the aversion to motion of the *Bryonia alba* patient. The four symptoms of Table 2 are hardly used.

The interesting aspect of Bayesian statistics is that it allows us to combine symptoms, as we are used to doing in homeopathy. If we combine symptoms we must multiply LRs for

	LR Ars	LR Bry	LR Gels
fatigue	**0.96**	**0.77**	**1.62**
dry cough	**0.82**	**1.43**	**0.86**
dyspnea	**0.72**	**1.41**	**0.46**
headache	**0.95**	**1.41**	**1.26**

Table 3: LR values, calculated from Table 1. LR Ars = LR for Arsenicum, etc.

	LR Ars	LR Bry	LR Gels
symptom combinations			
diarrhea+chill+anxiety	6.33	0.85	2.50
dry cough+headache+back pain	0.43	8.31	0.49
fatigue+chill+thirstless	0.41	0.83	12.01

Table 4: Combined LR values for combinations of symptoms

the same medication with each other. This renders combined LR values, as in Table 4 (page 38).

Combinations of symptoms show clear differences between medications. This is what we usually do in homeopathic medicine, but the present practice of homeopathic medicine does not allow this opportunity with common symptoms, because the indication by typography is not distinctive enough.

Let us now look at how this can be used in practice. We cannot say what the chance of success would be if we prescribed *Ars.*, *Bry.*, or *Gels.* randomly in COVID-19 patients, but suppose this (prior) chance would be 10% (only for the purpose of this example—not the true value). Applying Bayes' formula using the LR values from Table 4 we get the posterior chance for each specific medication population given the specific symptom-combination. This posterior chance is considerably increased, from 10% to around 50%. Of course, we can do the same with other symptom combinations. (Table 5)

prior chance 10%	posterior chance	
diarrhea+chill+anxiety	Ars.	41.0%
dry cough+dyspnea+slow onset+thirst	Bry.	47.8%
fatigue+chill+thirstless	Gels.	56.9%

Table 5: example of calculating posterior chances considering combinations of three symptoms and a hypothetical prior chance of 10%

Discussion

Bayesian statistics offers a scientific justification of homeopathic methodology and the opportunity to make better use of common homeopathic symptoms. This, however, requires systematic data collection of many cases. Each homeopathic practitioner could (should) contribute to this data collection, because we need large numbers to increase the accuracy of the outcome. There are several ways to contribute cases:

- AIH/Peter Gold's spreadsheet form. Contact: peter_gold@goldorluk.com
- José Eizayaga's form. Contact: jose.eizayaga@gmail.com
- Vithoulkas Compass. See www.vithoulkascompass.com/
- Clificol. See www.clificol.net/

Reliable outcome of data collection also depends on avoiding bias. If you send in a case with a good result, you must be sure that this result is caused by the medication you prescribed. If you used more than one medication, you should be sure that only one medication caused the cure to be able to connect the symptoms of the patient to that of the medication. Remember: garbage in = garbage out.

Data collection for prognostic factor research (PFR) is not meant to prove anything: not that homeopathy works, nor that one method is better than the other. *We simply want to improve our methodology by combining experience and learning from it*.

Conclusion

Applying systematic collection of experience is a valid scientific method in medicine because the medical process is essentially based on probability: both diagnosis and reactions to medications are not certainties, but probabilities. Bayesian statistics provides us with a solid mathematical foundation to apply experience. Homeopathic practitioners are necessarily active participants in this scientific process and must learn to collect data without bias.

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Since 1998, he has engaged in prognostic factor research (PFR) as an independent researcher. Among other activities, he has performed a prospective PFR study on more than 4,000 patients in 10 practices in the Netherlands. Since 2014, he has been an advisor to the CCRH of the Ministry of AYUSH on PFR.

Homeopathic PuZZle Answer (from page 5)

Bryonia alba (White bryony or wild hop)

A Brief Portrait

"The pleura and lungs become involved: the former tissue undergoes a pleuritis and in the latter are produced many of the pathological and symptomatic expressions of pneumonia…."The keynote of this remedy is found in the statement, 'all symptoms are aggravated by even the least motion'…."

I. Characteristic Symptoms of *Bryonia alba*:

- Very irritable, inclined to be angry.
- Delirium about his business, worse at night, after 3 a.m.
- Anxiety about the future; she fears she has not the wherewithal to live.
- *Coming into a warm room from cold air excites the cough***.**
- *Sharp stitching pains in the chest, cannot bear to move or draw a deep breath*.
- Parched and dry lips, likes to moisten them often, mouth dry and thirsty for cold water.
- Frequent drinking of cold water relieves the bitter taste and the inclination to vomit**.**
- Sensation when in bed as though he were sinking down.
- Headache from ironing, or from washing the perspiring face in cold water.
- Sitting up in bed causes nausea and fainting.
- Gastric affections, dry mouth and tongue, tongue coated white, giddy when stooping or rising, forehead heavy, taste bitter, food lies heavy, pit of stomach sore to touch, constipation, etc.
- Constipation, stools hard and dry as if burnt.
- Joints red, swollen, stiff, with stitching pains *from the slightest motion*.
- Sore, bruised pain in muscles of nape, as from taking cold, also in lumbar region or small of back.

(Daily Reference on Homoeopathic Therapeutics. Including Dosage and Biochemic Remedies. Ed. By R.F. Rabe, MD. Authorized by The American Institute of Homeopathy. B. Jain pub. 2004. Pp. 70,71, 74)

II. *Bryonia alba*

"…. Chest. *Bryonia alba* is suggested in descending respiratory complaints. First [there is] the coryza with runny nose, red eyes, lachrymation, aching through nose, eyes, and head. Then, the inflammation extends to post-nasal space, to throat, then to larynx with hoarseness—then bronchitis or even pneumonia with pleurisy.

During the above, *the patient is worse [from] all motion, has dullness of mind, fever, congestive headache, is sore, bruised, lame, worse 9 p.m.* Great dullness on waking from sleep in a.m. Has a cough of great violence, dry, hacking and constant—as if chest would burst from coughing, with rawness and soreness in chest. The cough is so severe that it shakes the whole body. He has to sit up in bed involuntarily and hold his side to relieve the pain.

The cough is worse p.c. [post coughing] with vomiting, *worse [going] from open air to warm*. In *Bryonia alba,* breathing is short and rapid; he desires to take a long breath to expand his lungs, but it causes too much pain. This shortness of breath almost amounts to suffocation (like *Phosphorus*)…

Bryonia alba has a spasmodic tracheal cough from a spot in upper part of trachea. He feels as if his head and chest would fly to pieces. It shakes the whole body, causing pain in [the] head and abdomen. It has a severe dry cough as though from a crawling in stomach. *The stitching pains when coughing with the necessity of holding side of chest are very characteristic*.

Bryonia alba

[MODALITIES] Note the *aggravation* of the cough: in a.m. from touch or motion; therefore, worse talking, laughing, smoking, eating or drinking.
Amelioration from firm pressure; lying on painful side; cold air or cold drinks.
In inflammation of the serous membrane in pleurisy, there is pain on the side better [by] lying on it, or better from pressure … .There is also fever, and stitching pains worse on motion, better from pressure.

[CASE] To illustrate, [I was] called to a case of pleurisy in which a little boy was on the couch with his father beside him holding the child's side. Every few seconds the little fellow would cry, "Hold my side, daddy, hold my side." A few doses of *Bryonia alba* 30x, every two hours, produced a well boy in 24 hours.

In ***pneumonia***, *Bryonia alba* is one of our most frequently indicated remedies. Usually every case is pleuro-pneumonia, and the best time according to some men to give it is during the stage of exudation, red hepatization. ([I would] give it from the first if indicated.) Pulmonary oppression is evident as seen from anxiety from oppressed inspiration. The breathing is quite difficult from stitches in the chest, which are *worse on inspiration or any motion*. The shortness of breath is increased by the *least motion*. Often in pneumonia there is pressure in the middle or lower part of the sternum; a bruised feeling in the chest and the characteristic shooting or stitching pains, which cause him to hold the sternum or side during cough. The expectoration is not yet free, with a dry teasing cough, sputum frothy, yellowish or blood streaked. It may be viscid, tenacious, light yellow or soft brick red…

When he coughs, he feels as though the chest would fly to pieces, hence he holds his sides to support it. Often, he must sit up when coughing; he may hold the head, the abdomen or the back; each may hurt with the cough. *Bryonia alba* pneumonias are usually on the right side, although a left-sided pneumonia would by no means exclude *Bryonia*…. There is the *Bryonia alba* quiet. An immobility to be seen before appreciated… ."

(White, D. Prosper, M. D. *The Homoeopathic Recorder*, v. 35, 1920. P. 14-16.)
- Editor. A.B.

Requirements for Submission of Manuscripts

The American Journal of Homeopathic Medicine adheres to the requirements for manuscripts as promulgated by the International Council of Medical Journal Editors. A complete description of these requirements can be found on the American Institute of Homeopathy's website (www.homeopathyusa.org) or the ICMJE's website (http://www.icmje.org). Authors of experimental studies should pay special reference to these requirements, which are too exhaustive to list here. A brief summary of the bulk of the requirements is here listed:

Clinical case reports

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