OPEN ACCESS
ISSN: 2835-9496
Siddharth A, et al. (2025): 858
Ameri J Clin Med Re, 2025; 5(3): 100203
DOI: 10.71010/AJCMR.2025-e203

Research Article
American Journal of Clinical and Medical Research

Forestalling Future Pandemics: Lessons from PISCOV Trial (Ph Based Integrated SARS Cov-2) Immunity in Human Subjects and The Theory of Survival of The Flattest

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Citation: Siddharth A, Sapna A, Deepti Y, Shreyash D (2025) Forestalling Future Pandemics: Lessons from PISCOV Trial (Ph Based Integrated SARS Cov-2) Immunity in Human Subjects and The Theory of Survival of The Flattest. Ameri J Clin Med Re: AJCMR-203.

Received Date: 23 February, 2025; **Accepted Date:** 07 March, 2025; **Published Date:** 12 March, 2025

Abstract

The world witnessed the havoc done by Covid-19 and is still recuperating from it's aftermath. The only hope, the scientific society can act in order to avert such devastation in future is, from the lessons learned by the Covid-19 pandemic, keeping in view the challenges and opportunities provided by the authors. The Theory of "Survival of the Flattest" hereby proposed by authors, which is a contradiction from the established Theory of "Survival of the Fittest" is verified here as a complementary addendum to Ashby's "Law of Requisite Variety" with the notion that "only the variety can destroy the variety"[1]. The key studies like Digital Organisms Study (2001), Viroid Competition Experiment (2006) and Metabolic Trade-offs and Diversity maintenance (2011) are some major works, which support the "Survival of the Flattest" theory, where genotypes with greater mutational robustness occupy flat curve. We have to look back at the Permian extinction, when life almost ended on earth and death created opportunity for those humble creatures which survived, including one lineage which produced our ancestors, the first mammals.

The novel corona or other such viruses needs acidic environment inside host cells of humans to gain entry and replicate further. If the host blood pH can be changed to more alkaline range from normal 7.35 -7.45 range, than then they are protected from infection by such infections, through inhibition of receptor mediated endocytosis of virus inside host cells as the cellular endoplasmic vesicles require an acidic environment to transport virus inside the host cell. This important blood chemistry and its consequent sub cellular processes provide a model whose clinical effects have been shown to provide both post-exposure and pre-exposure prophylaxis from Covid-19 in data set of 110 high risk and 3000 general population respectively. Further, if applying these simple, natural interventions with one exception of Clathrin Inhibitor group, to 2/3rd of mass population , than a herd immunity pattern gets evolved .The final data of PISCOV trial is available, which are significant and is also an inexpensive intervention protocol which granted almost 88% immunity from SARS CoV-2 or other such potential infections .The integrated approach in intervention arm used in the trial consisted of combination prophylaxis by Neem Bark Extract(NBE) concoction in dosage of 10 ml bd, Arsenicum album 30C – 4 times daily, Clathrin Inhibitor drug Chloroquine in dosage of 150 mg bd and Dexamethasone orally in dosage of 0.5 mg tds for the duration of 10 days to symptomatic as well as asymptomatic high risk contacts of proven Covid-19 patients.

This comprehensive exploration also delves into the ancient practice of yoga and meditation, elucidating their profound impact on human consciousness and well-being for sustaining life in adversities. Rooted in ancient texts like Yoga-Vasishtha, Yoga is depicted as a systematic path toward inner growth and higher states of consciousness, fostering emotional steadiness, mental clarity, and physical vitality. While traditional Yoga practices focus on attaining truth and enlightenment, the highest form of Transcendental Meditation i.e "Surat-Shabda-Yoga, of the *Anhad shabda* of 5 letters Ra Dha Sva Aa Mi emphasize spiritual upliftment through meditation and connection with the Supreme Being."
Who manifested in human form as ***Param Purush Puran Dhani Huzur Soami Ji Maharaj*** (208 years ago) and continues to manifest through it's Nij Dhar in the present form of Waqt Sant Satguru ***Param Guru Huzur Prof. Prem Saran Satsangi Sahab*** at the headquarter in Dayalbagh, Agra, India 282005, as we witness the day of auspicious Basant Panchami, March 25'. Drawing parallels across different religious traditions, the concept of 'shabda' or the word is revered as the creative force behind the universe. By attuning to the internal sound or word through meditation, practitioners aspire to access higher realms of consciousness and unlock boundless creativity.

Summary of Findings in the paper: -

1. Mortality Reduction: The PoEP intervention significantly reduced the odds of death, the study group had significantly lower mortality (1 death) compared to the control group (7 deaths), with an odds ratio (OR) of 0.127. This implies an 87.6% ~ (88%) reduction in the odds of the event occurring due to the exposure (calculated as 1 - 0.124 = 0.876) and

relative risk (RR) of 0.143, with a notable trend towards statistical significance (p-value = 0.066).

2. RT-PCR Positivity: The intervention was highly effective in preventing COVID-19 infection, with statistically significant differences in positivity rates (p-value = $7.24 \times 10^{\wedge -25}$).
3. Blood pH Association: Higher blood pH (> 7.40) in the study group was significantly associated with lower mortality compared to the control group (p-value = 0.0276).
4. Antibody Response: The study group exhibited the presence of IgM antibodies, indicating an early antibody response, while the control group did not.
5. The theory of "Survival of the Flattest" suggests that humbleness, rather than power or intelligence, is key to sustained survival. A successful system must exhibit greater adaptability through variety and humility to the challenges posed by its environment. As exemplified in this paper titled "PISCOV Trial" where the community of humble residents survived and sustained the Covid-19 pandemic as com;pared to other neighbourhood communities.
6. Yoga is the pursuit of happiness both externally and internally, with true happiness found within. It promotes emotional steadiness, concentration, physical fitness, mental detachment, and bodily homeostasis. By harmonizing body, mind, and soul, Yoga fosters a well-balanced and integrated personality. One can reach the highest region of universal consciousness or purely spiritual region, which in other words is attaining the state of ultimate truth and reality. Its real purpose is the spiritual upliftment from one hierarchy of consciousness to another higher level of consciousness thus improving survival and leading to quintessential harmony from *Ab Aeterno to Ad Infinitum.*

These results support the protective effect of the PoEP intervention in preventing COVID-19 infection and reducing mortality in SARI patients, with a significant association between alkaline blood pH and improved outcomes. Further investigation with a larger sample size is warranted to confirm these findings.

The current paper focuses on further forestalling of such virus borne pandemics as the same principles which apply to Covid-19 will also be applicable for other such viruses or microbes.

Keywords: Covid-19 Vaccine With pH 7.45 or above, the proposed ten factors, discussion, pandemic, Surat-Shabda-Yoga, 'shabda', Yoga-Vasishtha, RT-PCR

Introduction

"Quintessential harmony: integrating yoga, meditation, and pH-based immunity in the pursuit of ultimate consciousness and well-being for future pandemic preparedness": The Theory of Survival of The Flattest.

Since ancient times, Yoga is a systematic process for accelerating growth of a man in his entirety. With this growth, man learns to live at higher states of consciousness. In 'Yoga-Vasishtha'[2] one of the best texts on yoga, the essence of yoga is beautifully portrayed thus, "*manah prashamanopayah yoga ityabhidhiyate*"– Yoga is called a skillful trick to calm down the mind. The basis of yoga is search for happiness externally and internally. The happiness is right within us. Yoga is a state of great steadiness at emotional level, balance of concentration, physical fitness, and detachment at mental level and homeostasis at body level. It integrates the personality by bringing body- mind-soul coordination in a well-balanced way[3].

Yoga and meditation are now standard therapies of integrated system of medicine in the management of different health problems. As per WHO's guidelines for palliative care[7], they "provide relief from pain and other distressing symptoms; affirm life and regards dying as a normal process; intend neither to hasten or postpone death; integrate the psychological and spiritual aspects of patient care; offer support system to help patients live as actively as possible until death; offer support system to help the family cope during the patients' illness"[11].

Human body is a biological, open system and maintains its vital force in the changing environment. Whenever there is difficulty in maintenance of vital force, disease develops. Disease state is cured by many medicinal systems. Esoteric healing[5,8] (through Yoga, meditation and spiritual intercession) is the system where its believers regard Supreme Being as omnipotent, omnipresent and omniscient. Such persons take ill health as a boon and pray through meditation that he may by his mercy grant health or if God wishes otherwise, they happily accept it so that they keep moving ahead on their spiritual path and thus help in enhancing their consciousness. Modern science in terms of cognitive psychology or neurophysiology has begun to emphasize the role of consciousness but, that is confined only to the physical world. It is only with the advent of supreme being, Param Purush Puran Dhani Soami Ji Maharaj (208 years ago) that in the religion of saints (Ra Dha Sva Aa Mi Faith), the ultimate consciousness or the super consciousness of the highest order has been revealed and can be attained by any human being through meditation[9] as the whole existence has evolved and is dissolved in these five words only[10].

By integrating the inner experience with neuroscience(Price and Barrell)[13], as a method of investigating the hypothesis of meditational practices in attaining the highest order of consciousness, for those who are the seeker of ultimate truth, ultimate reality and ultimate wisdom, is the aim of the research work which the authors are working on titled "forestalling future pandemics: lessons from PISCOV trial (pH based integrated SARS COV-2) immunity in human subjects and the theory of survival of the flattest"[14].

The research work "PISCOV TRIAL", where authors have correlated the pH-based immunity for controlling future pandemics and Covid-19 pandemic and how the hypothesis proposed for the first time by authors that only there will be and always there had been "SURVIVAL OF THE FLATTEST" as contradiction to established Darwin's Theory of "Survival of the Fittest" is undertaken with the aim of ~ "FORESTALLING FUTURE PANDEMICS: LESSONS FROM PISCOV TRIAL (pH BASED INTEGRATED SARS CoV-2) IMMUNITY IN HUMAN SUBJECTS AND THE THEORY OF SURVIVAL OF THE FLATTEST"[16].

The world witnessed the havoc done by Covid-19 and his still recuperating from its aftermath. We are living in fear of further such pandemic, either by mutated Corona virus or some other microbe with the potential of rapid spread with high morbidity and mortality. The only hope, the scientific society can act in order to avert such devastation in future is, from the lessons learned by the Covid-19 pandemic, keeping in view the challenges and opportunities provided by the nature. The Theory of "Survival of the Flattest" hereby proposed by authors, which is a contradiction from the established Theory of "Survival of the Fittest" is verified here as a complementary addendum to "*Ashby's "Law of Requisite Variety*" with the notion that "only the variety can destroy the variety"[15]. We have to look back at the Permian extinction, when life almost ended on earth and death created opportunity for those humble creatures which survived, including one lineage which produced our ancestors, the first mammals.

In philosophical terms, the theory of "Survival of the flattest" as hypothesized, means that those human beings who are humble will survive and not those who are clever and powerful. In order to fulfil its purposes, the system must be capable of a greater variety of response and humbleness than the variety manifested by the environment. As per laws in the General Systems Theory, only the variety can destroy the variety. *Ashby's Law[1] {V(c)>=v(s)} of Requisite Variety*. Now in order to support our hypothesis of "Survival of the flattest" we list the names of humble creatures, living beings which survived mass major extinctions;

The humble Tardigrades survived last five major extinctions. Fossils date their existence on earth to more than 500 million years ago.

Lystrosaursus (Book by Annalse Newitz- Scatter, Adopt and remember: How humans will survive a mass extinction). Talked about the underground burrowers and those who walked most, survived the permian extinction.[16]
Birds- Avian Dinosaurs: birds are the only dinosaurs to survive the mass extinction event 65 million years ago.
Frogs and Salamender
Lizards
Snakes
Turtles, Alligators and Crocodiles
The Flowering plants (angiosperms species) survived the mass Crateaceous-Palaeogene extinction caused by asteroid hit 66 million years ago. So what made them survive, despite being immobile and relying on the sun for energy? It's the flower power that makes them nature's true survivors.[18]
On the contrary the following civilizations, which were considered to be the best of their times in technology, education, civic sense, bravery and academics perished despite being the fittest:-
Harappa and Mohanjodaro
The Ancient Greece
The Roman Empire
The Great Nalanda University Takshilla, Vikramshilla

Some key studies supporting the theory:

A. Digital Organisms Study (2001): Researchers at the California Institute of Technology conducted experiments using digital organisms—self-replicating computer programs subject to mutations. They observed that, at elevated mutation rates, organisms with slower replication rates but higher mutational robustness outcompeted faster-replicating counterparts. This study provided initial evidence supporting the "survival of the flattest" phenomenon in a controlled digital environment.[19]

B. Viroid Competition Experiment (2006): A study involving two viroid species infecting the same plant demonstrated that, under increased mutation rates, the viroid with slower replication and greater genetic variability outcompeted the faster-replicating, genetically homogeneous viroid. This experiment extended the "survival of the flattest" concept to biological entities, highlighting the advantage of mutational robustness in high-mutation environments. [20]

C. Metabolic Trade-offs and Diversity Maintenance (2011): Research published in Nature explored how metabolic and physiological trade-offs can lead to stable diversity maintenance. The study found that, due to quasispecies-level negative frequency-dependent selection and differences in mutational robustness, both the fittest and the flattest genotypes can coexist. This coexistence challenges the traditional competitive exclusion principle, suggesting that diversity can be maintained even in homogeneous environments.[21]

The same holds true if the individualism is replaced with nations as a whole and their further demarcation as underdeveloped, developing and developed countries. If the enemy is the same, it is invisible and immune to the available medical technology than why fight as individual nations with different policies. We witnessed an exponential curve of the novel Corona Virus infections in the developed nations and medical doctors, scientists, politicians were working day and night to flatten the curve. There was an indispensable need of an effective vaccine against covid-19 for which many candidate potential trials were underway in many nations simultaneously. But now, in the Post-Covid era, we are witnessing an alarming rise in young cardiac deaths and an exponential increase in diabetes in young[17].

In modern times, particularly with reference to the post-Newtonian era timeline, the philosophy has been undermined by true believers of science who strongly advocate "Survival of the Fittest" in evolutionary terms of natural selection of the species and sub species, but as we shall see and verify the deviation from this existing principle in the paper titled "Survival of the Flattest" to prove our theory, particularly when survival of the human race is at stake. However, the author will deal with the subject in consideration i.e. global pandemic of novel Corona virus and its prevention by a unique and naturally inherent community immunization methodology based on socio-economic-cultural-dietary factors(S-E-C-D) prevailing in the community under study i.e, India and verified post facto scientifically while comparing with other nations and applying the ancient Greek principle of *"Omne trium perfectum" or The Rule of Three*[22] *or Trinity of Gender Free Superhumane.*

Approval of Regulatory Body

The authors of this proposed hypothesis conducted a randomized double blind actively controlled phase2/3 merged trial (trial PDF attached), (Indian Council of Medical Research, Clinical Trials Registry of India- Ref No-CTRI/2020/05/025490 and UTN No-U1111-1252-7438) as PISCOV trial (pH based

Integrated SARS Cov-2 Immunity in human subjects) and the trial design is attached at the end of this paper.

Role of pH:

The pH, a logarithmic scale of concentration of hydrogen ions is a very important factor controlling the milieu interieur and providing equilibrium for survival of human beings against external variations. The pathophysiological consequences of diet dependent extracellular and intracellular increases in hydrogen ion and diminution in bicarbonate concentration, and chronically developing whole-body acid retention, though mild, persisting in otherwise healthy individuals for decades, and increasing in severity with advancing age, in men more than women, and in those with chronic metabolic disorders like Diabetes, Chronic Kidney Disease, Chronic liver disease, Chronic Pulmonary disease, Ischemic Heart Disease and Cerebro- Vascular Disease, is the inciting stimulus and basis for writing this paper **Covid-19 Vaccine With pH 7.45 or above** as these are the vulnerable groups particularly targeted and hit hard by the novel Corona Virus and there is only one factor, seems to be apparently common among them and that is the extracellular and intracellular acidic pH of its host(Humans). As it is evident that, for corona virus to gain entry inside human cell, the acidic environment of endosome is indispensable, and in subjects where the virus has entered the host cell, further replication leading to moderate to severe Covid-19 syndrome is facilitated by acidic intra and extracellular pH. We witnessed an exponential curve of the novel Corona Virus infections and mortality in the developed, developing as well as underdeveloped nations and medical doctors, scientists, politicians worked day and night to flatten the curve. There was an indispensable need of an effective vaccine against covid-19, for which many candidate potential trials were done in many nations simultaneously. But the infection rate and death toll rose globally as pandemic was swift with no definitive drugs. We have to rethink out of the box, on an alternative strategy which can bring about the same protection as an ideal vaccine would do, in forestalling future such pandemics. The present paper is being presented with the same strategy and intention and the approach used here is based on the fact that if we can modify host (human) characteristics by simple pragmatic interventions than the objective is achieved. And, as we move on, the author will justify that how the change of blood pH from normal 7.35-7.45 range to 7.5 in the alkaline range by simple interventions as proposed, than the humans are protected from viral entry and/or replication if the virus has already entered inside the host cells, an effect which we anticipate for an ideal vaccine to provide. Thus, this unique **Integrated Vaccine for Covid-19** is both a pre-exposure as well as post-exposure prophylaxis. Furthermore, out of the proposed 10 interventions (8 modifiable and 2 non-modifiable), one would need to adopt to any 3 to obtain that level of protection as a vaccine would do. The pH 7.5 is taken as a target because, it is easy to achieve by simple interventions, applicable to masses as an integrated vaccination strategy and is not harmful for homeostasis. The true believers of science strongly believe in "**Survival of the Fittest**"[16] in evolutionary terms for natural selection of the species, but as we shall see and verify in the proposed hypothesis titled as **"Survival of the Flattest**", the deviation from the existing principle which provided survival benefit to those population groups who lie low or flat in the demography curve in present circumstances. Overall it can be seen that, mother nature does it so as to establish the leveling power of past and present pandemics over mankind thus eliminating the rich- poor divide. It is the developed and advanced nations where the pandemic has wrecked havoc not the poor and underdeveloped debt-ridden nations.

Material and Methods

Inclusion Criteria:

Age From	18.00 Year(s)
Age To	60.00 Year(s)
Gender	Both
Details	1)High risk healthy contacts of proven Covid-19 patients,2) suspect case of covid-19 for whom testing for Covid-19 could not be performed for any reason or inconclusive,3) cases with Flu like illness residing in a location reporting community transmission of Covid-19 4) cases of Interstitial pneumonia with history of close contact of Covid-19 patient and are covid-19 negative by RT-PCR 5) Healthcare workers in direct care of Covid-19 patients. All above presenting within 5 days of exposure

Exclusion Criteria:

Details	Patients suffering from: Diabetes, high Blood Pressure, Coronary Heart disease, Heart Failure, Septicaemia, Cancer, Acute or Chronic Pulmonary disease, Chronic Kidney Disease, Major Nutritional disorder, Immunocompromised State like HIV, post organ transplant recipient, Pregnant woman, Chronic Liver Disease, Major Neurological Disorder, Anosmia, Acute dysarthria, Acute abdomen or Gastrointestinal emergency, Major Trauma, Pyrexia of Unknown origin and any other life threatening illness which requires dedicated medical care.

Total Sample Size:
110 Sample Size from India
Final Enrollment numbers achieved (Total) = Applicable only for Completed/Terminated trials.

Study Design:
Double- Blind Randomized, Parallel Group, Active Interventional Controlled Trial.

Intervention	1) Clathrin Inhibition and lethal mutagenesis of virus 2) Cholecalciferol 3) Azadirachta indica Bark extract concoction 4) Arsenicum album 5) theoxanthine, theobromine, theaflavins and polyphones in tea 6) High pH diet.	After Randomisation, study group will receive post-exposure-prophylaxis (PoEP) in the form of interventions by protective factors which raise intracellular pH, for a period of 10 days,tested for blood and urinary pH ,and subsequently tested for Covid-19 by RT-PCR. Doses 1.Chlorpromazine-10 mg Frequency -12 hourly Duration-10 days Repeat after -5 weeeks. 2.NBE extract concoction Dose 10 ml Frequency-12 hourly Duration-10 days 3.Arsenic album 30 Dose-5 drops daily Duration 3 days Repeat after 7 days Duration-5 weeks 4. sunlight exposure 2 hours daily Duration-5 weeks 5.Tea(Theoxanthine) Dose - 50 ml Frequency-6 hourly Duration -5 weeks 6.High pH diet.
Comparator Agent	Monitoring of health parameters and the standard treatment protocol as per ICMR guidelines.	After randomisation,those who will be in control group will be monitored for vital health parameters ,will be treated as per guidelines of ICMR for high risk Covid-19 suspects and subsequently be tested for blood and urinary pH and Covid-19 RT-PCR.

Method of Generating Random Sequence:
Computer generated randomization
Method of Concealment: Alternation
Blinding/Masking: Participant and Investigator Blinded

Primary Outcome:

Outcome	Time-points
Full (100%) protection from Covid-19 infection and Disease.	5 weeks

Secondary Outcome:

Outcome	Time-points
All cause ICU hospitalization of SARI Cases or mortality.	5 weeks

The author has applied these intervention factors in short term pilot study. One was done on 110 serious hospitalized patients (55 each in study and control groups) who presented with severe acute respiratory illness (SARI) of less than 10 days duration, in the Isolation wards of the trial hospital, in the city of Agra, which had experienced more and more covid-19 cases with community transmission. And it was found that the patients of SARI in study group after receiving **post-exposure-prophylaxis (PoEP)** in the form of intervention by 3 protective factors for a period of 10 days ,and subsequently tested for Covid-19 , none of them turned out to be Covid-19 positive on RT PCR (reverse transcriptase Polymerase Chain Reaction) test of throat and nasal swabs , even when 80% of cases in this group were high risk close contacts of proven covid-19 patients and infected health care workers The later detection of IgG antibodies to SARS CoV2 was an interesting observation in patients of study group (only 1 death was noticed) . As compared to the control group of proven Covid-19 patients, which were blind to the investigator and who were not exposed to modifiable protective factor before contracting the infection and all had a history of low pH diet consumption habits, and subsequently 7 deaths occurred in this group. Second case series, an observational one, was done in a community of around 3000 people, whose participants (study group) were given **pre-exposure- prophylaxis (PrEP)**, and 99.9996666667 protection was observed, as compared to the control group where 33 cases of Covid-19 were detected (1.1%), providing insight into the proposed hypothesis in a regression model for the 10 factors in consideration. The ten factors which provided immunity are 1) Unique host miRNa and mutation in spike surface glycoprotein. 2) Lethal mutagenesis and Clathrin Inhibitors. 3) BCG vaccination and induced innate immune response. 4) Malaria

endemicity and role of Chloroquine/Hydroxychloroquine (HCQ). 5) Host blood and intracellular pH and factors influencing it. 6) Dietary practices controlling the host pH. This factor is unique as it has both negative and positive correlation for causation and prevention respectively and thus can negate any other protective factor. 7) Protective action of the theoxanthine, theobromine, theaflavins and polyphenols in tea drinkers.8) Neem Bark Extract (NBE) from Neem tree (Azardirachta indica) and use of Neem stem as a toothbrush by 80 % Indians.9) Law of Similia and Doctrine of Friendly antipathy of Cytokines.10) Agricultural workers, and this signifies for those in rural areas/villages who work under sunlight for more than 3 hours in a day leading to immunity against Covid-19 with adequate levels of Vitamin D3.

The above 2 observational cum experimental studies, provide very important message for prevention of global citizens from such deadly diseases and are a boost for this theory as outlined in detail below. One additional significant observation in the study and control groups, though separate but worth mentioning here is that more covid-19 serious hospitalised patients suffered and died due to secondary lethal bacterial pneumonia, particularly by Gram Negative bacteria (Klebsiella sp. being commonest) and sepsis, particularly in those who are debilitated, diabetics or immunocompromised (acquired or inherited), having a common precursor of existing periodontal disease causing pathological fermentation in mouth with acidification of oral cavity pH, which favours entry of and infection with Covid-19. And as the treating doctors around the world are focused on covid-19 and the innovative treatment strategies to combat that, they were, as per data available to author, not getting routine bacterial cultures of throat and sputum done and missing the important diagnosis of bacterial aetiology for pneumonia which is curable with antibiotics available. The author used combination of Amino glycoside with third generation cephalosporin (Ceftazidime) or Penicillin (Piperacillin) and cured 48 out of 50 interstitial pattern pneumonia cases. The relative immunity of the patients to Covid-19 infection, who were also suffering from auto-immune disorders like Rheumatoid Arthritis and SLE, and were on long term HCQ (Hydroxychloroquine sulfate), was also a new finding observed in a pilot study on 220 patients by the author. The last observation which the author would like to mention here is that Covid-19 infection runs a chronic progressive debilitating course in more than 50 % of those infected with a syndrome similar to Dysautonomic syndrome.

Further to above pH hypothesis and results obtained in the trials, the author reminds of the similar experiment conducted during the Spanish Flu pandemic of 1918, where it was seen that those population groups who had the daily habit of taking bicarbonate of soda in water did not get sick and doctors practiced this alkalinizing theory to save the masses.

The prospective randomised double blind actively controlled interventional trial to verify the above hypothesis on 110 subjects titled as **"pH based Integrated SARS Cov-2 Immunity in Human Subjects trial"** with trial acronym as **"PISCOV"** has been duly registered at Clinical Trials Registry of India, ICMR, New Delhi and also has the approval of Institutional Review Board Ethics Committee with trial commencement date on 7th June 2020 to be carried out initially over the period of 6 months and than further continue. (trial pdf attached as supplement manuscript).

The plight and cry of mankind due to meddling with Nature can be mitigated by Nature only and none else. As we appreciate, the physical universe has evolved from the basic elements, which includes Hydrogen and Helium, produced in the hot, dense conditions of the birth of the Universe. Therefore, much before life or living being in any form it was Hydrogen which was the precursor of life and this holds true even today. The pH, a logarithmic scale of concentration of hydrogen ions is a very important factor controlling the milieu interieur and providing equilibrium for survival of human beings against external variations. Therefore, if we set aside a germ theory for a while and go back to early creational era, before evolution of the species or life in any form, we will appreciate that for the Universal sustenance and expansion post bigbang, the composition of Plasma and low masses elements were indispensable. With this preamble, the author proposes the new hypothesis in this paper as we shall observe that ultimately, it is the delicate balance of basic elements which is governing all the factors known or unknown in the survival of human beings, whatsoever the subject of contention may be.

The paper is scientific in content, but the philosophical foundation cannot be overlooked. The author has applied these factors on 110 serious hospitalised patients (55 in each study and control groups) who had severe acute respiratory illness (SARI) in the Isolation ward of hospitals in Agra, which experienced more and more covid-19 cases with community transmission. It was found that the patients of SARI in a study group after receiving post-exposure-prophylaxis (PoEP) in the form of exposure to protective factors conferring immunity to Covid-19, for a period of 10 days and subsequently tested for Covid-19, none of them turned out to be Covid-19 positive on RT PCR (reverse transcriptase polymerase chain reaction) test of throat and nasal swabs ,and later detected to be SARS CoV 2 IgG antibodies positive after a mean period of 18 days, even when 80% of cases in this group were high risk close contacts of proven covid-19 patients and infected health care workers (only 1 death occurred in this group). As compared to the control group of proven Covid-19 patients, which were blind to the investigator and who were not exposed to any protective factor, before contracting the infection and 80 % had a history of a low pH diet (non-vegetarian) consumption habits, and subsequently 7 deaths occurred in this group. The 3 protective factors to which the study group was exposed are:

i) Exposure to sunlight for 3 hours in a day
ii) Dietary practices controlling the host pH
iii) Protective action of theoxanthine, theobromine, theaflavins and polyphones in tea drinkers with consumption of minimum 50 ml of black tea at least 4 times daily.

Those subjects of the study group, who could not adapt to any of the above factors, were asked to have a choice from the any of the below 3 factors for protection:

i) Consumption of concoction preparation of Neem Bark Extract (NBE) from Neem tree (Azardirachta indica)
ii) Intake of Clathrin Inhibitors for lethal mutagenesis-Largectyl or Chloropromazine.
iii) Intake of Arsenic album in 30 potency as per Law of Similia and Doctrine of Friendly antipathy.

Covid-19, originated as a pathogen in food (sea food) in Wuhan. Thus, it is a food borne pathogen, with its origin and first entry into human beings from stale or corrupted or impure food. Thus, all the natural principles, right from ancient times until date, which apply for the prevention of diseases arising out of stale or

corrupted or impure food also applies here, no matter that its commonest mode of spread in humans is air borne or through contact with fomites. Here comes the significance of Lacto-vegetarian diet[23] and amino acid tyrosine through disharmony in sympatho-adrenaline system of humankind with subsequent disturbance in homeostasis of adrenaline resulting in emergence of lifestyle disorders providing fertile ground for global pandemics such as Covid-19.

The basic natural principles of Science and Hygiene and Philosophy apply in this case as well and are thus a major criteria of prevention amongst masses as can be studied from the exponential behaviour of its spread in the world in most clean and highly technologically advanced developed countries such as China, USA, Italy, Germany, UK, France etc. versus relative immunity of population groups with poor hygiene and sanitation infrastructure like India, Nepal, Sri Lanka and African countries. Again, the theory of "**Survival of the flattest**" applies here as well as the story goes on further. Somewhere, somehow Adam has eaten the stale apple in Eden's garden and thus the paradise of global health is lost.

Furthermore, to validate the significance of three sets of factors taken out of total 10 proposed, whose cumulative effect provides significant prevention from infection against the novel corona virus infection, the author highlights the findings of the another pilot study, an observational one, again short term conducted over a period of 2 months was done in a community of around 3000 people, whose participants (study group) were given **pre-exposure-prophylaxis(PrEP**) with 3 immunity factors exposure and 100% protection was observed as compared to the control group of another 3000 people of neighbouring community, which were not exposed to the protective factors , and where 33 cases of Covid-19 were detected (1.1%), thus providing significant insight into the proposed hypothesis of minimum requirement of application or adoption of 3 protective factors by the population groups in a regression model for the 10 factors in consideration. Therefore, this was an Integrated approach of Covid-19 prophylaxis, especially seemed plausible when the world had no single vaccine in hand to stop or prevent the ongoing accelerating pandemic. Out of the 10 listed protective factors, 8 are modifiable and 2 non-modifiable, stressing the importance of the study that still at this point of time in the evolving threat of such future pandemics , the communities, masses or nations, who can modify their socio-economic-cultural-dietary (S-E-C-D) behavioural patterns, by which they may be able to survive it and this modified behaviour will put them in the Flat portion of the fitness curve.

An important outcome underlying these factors is the concept of inducing **Artificial Hibernation** in humans, especially amongst those who have had adopted to the artificial lifestyle of living with more dependence and reliance on man-made luxuries and eating habits, while leaving aside Nature and its articles or vegetation which possesses in its core the power of Natural Hibernation and the Philosophy of Survival of the Flattest. Therefore, the author tries to challenge the Darwinian Theory of "Survival of the Fittest "and further scientific expositions

based on it. It is all about integrating the Science, whose ultimate goal is TRUTH, with the Philosophy, whose ultimate goal is WISDOM or reality and we will appreciate that at the highest level, the Science, Philosophy and God are one and the same[6] ***P.S.Satsangi Sahab***. Wherein the author humbly and with head bow seeks for the shadow of the Saint, WHO got the power to cure the sick (The Gospels) and kill Satan.

Therefore, taking a strong contradiction to theory of natural selection and survival of the fittest, the theory of Survival of the flattest as proposed in this paper, states that the organisms, particularly viruses which have high mutation rates and are slow growers are the ones which outnumber the quasispecies with high replication rate and more homogeneity. As an experimental example, where the two viroids were shown to coinfect the same plant and it was shown that the one with the fast population growth and genetic homogeneity was outnumbered by the species with slow growth and high mutation rate or a high degree of variability.[27]

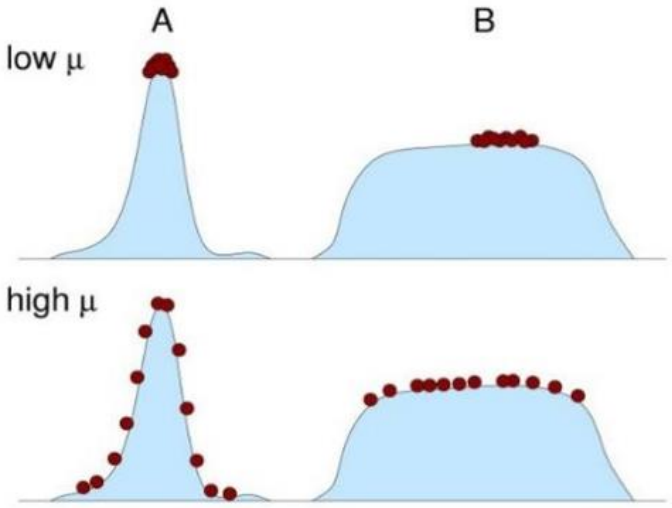


Figure 1: Schematic drawing of the **survival-of-the-flattest effect**. At low mutation rate μ, all individuals accumulate close to the top of the local fitness peak, and hence the individuals on peak An out compete the individuals on peak B. At high mutation rate, most individuals on the steep peak A are located at low fitness values, while the individuals on the flat peak B remain close to the local optimum. As a consequence, the mean fitness of the individuals on peak B exceeds that of the individuals on peak A, and thus the former outcompetes the latter.
Source publication:[28] Claus O Wilke, BMC Evolutionary Biology 2005, 5:44

So, now taking a dig with this research in background, a new theory 'FIGHT DIVERSITY WITH DIVERSITY' with two groups of living organisms in view, one Human Beings and the other Corona viruses was hypothesized, wherein these two biological species interacting under different conditions of susceptible host (Human) and quasispecies virulent agent (Virus) to evolve a completely opposite landscapes in the environment which was favourable for the epidemic to grow exponentially.Again to mention here the Ashby's "Law of Requisite Variety" with the notion that "only the variety can destroy the variety". The control system must have sufficient variety to match the variety present in the system it seeks to control. Essentially, the complexity of the controller must equal or exceed the complexity of the environment or challenges it faces.

I will consider the agent part first. The corona viruses are composed of variant genomes, closely related and posses high mutation rates. This property, which is inherent in their replicative behaviour exposes them and make them fragile, if they cross certain limit of mutation, bringing about error catastrophe and consequently leading to viral extinction or lethal mutagenesis.[29]

Now, this property of Corona group of viruses including Novel Corona Virus 2019, can be a harbinger of hope to help us all believe once again in God's provision and goodness and new vision. The drugs or natural means, which increase mutagenic behavior in the viral genome, which has infected the host cell (Humans) has the potential to kill the virus after consumption by the host. If we look at the other side of the same scene, the host factors, inherent or acquired by prevailing population characteristics and socio-cultural factors, which are favourable for the viral genome mutations and thus make it cross the critical limit of mutation to enter into lethal mutagenesis will definitely act as a vaccine for the susceptible population groups with entirely different socio-cultural-economic characteristics.

Therefore, coming to the Host part, the human beings, who are sufferers of the global catastrophe arising out of the agent Covid-19, have shown different susceptibility to the virus in different countries as well as different regions of the same country or in the same family with regards to infectivity, symptomatology and case fatality rate. Therefore, again coming back to the above Hypothesis of Survival of the Flattest, applying to host factors, it would not be an exaggeration to say that the population with highest variability in culture, socio economic factor, education pattern, demographic, standard of living , withstood best and strong against this invisible enemy (agent) Covid-1 as compared to populations with more homogeneity , high socio economic standard and a refined culture .Hence , this time again , the property of Flat Curve has been used as a Positive Outcome of Hypothesis in containing the spread of deadly novel coronavirus. The important observation to ponder here is that all the above enumerated socio-economic-cultural-dietary factors(S-E-C-D) prevailing in the community under study are also the ones which raise the host pH from acidic to alkaline range thus conforming to the scientific basis of inherent protection conferred by them.

Now, imagine a scenario, where these two properties of Host and Agent, both favouring and indicating towards a remedy, from out of the box thinking, working in unison to eradicate the Covid-19, the deadliest and strongest enemy of mankind during the pandemic.

First I will try to enumerate the host, agent and its resident environmental factors which are counter protective synergistically against Covid-19/or similair infections or virulence in the Indian population under consideration and which lie in the flat portion of the curve to justify the hypothesized theory of Survival of the Flattest and the heterogeneity of the citizens of such population groups make them unique in fighting the viral quasispecies diversity with their demographics and diverse **Socio-Economic-Cultural-Dietary(S-E-C-D)** factors such that they are enabled to fight diversity with diversity. They also explain a very important observation that why no community transmission occurred even when 3 million of migrant labor exodus from cities to villages has occurred in closed groups in contrast to high infectivity and rapid transmission which occurred amongst one community group of 3000 like cultured people, who assembled in a religious ceremonial congregation and got infected (more than 600 out of a total 3000 attendees). The relative risk and odds ratio of the negative factors as the causation of viral spread emphasize the importance of behavioural modification by communities, masses or nations to combat this dreadful enemy. The proposed ten factors (and not ten commandants) are:

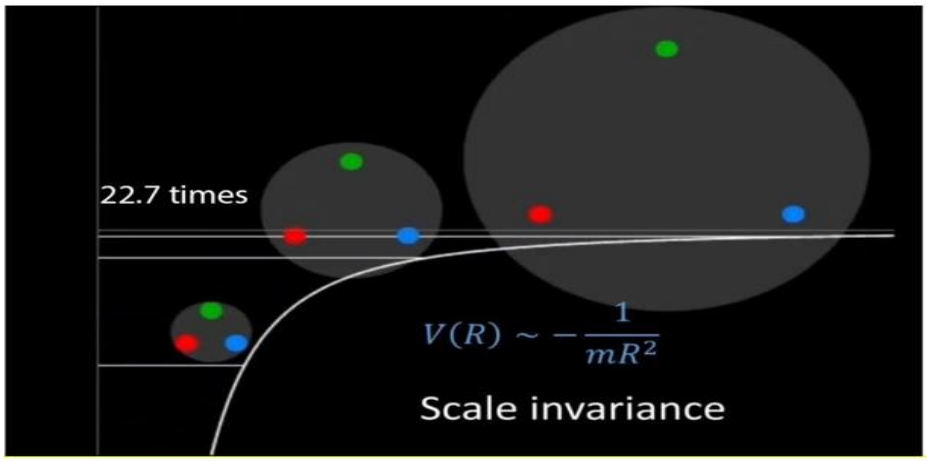
1. Unique host miRNa and mutations in spike surface glycoprotein.
2. Lethal mutagenesis and Clathrin Inhibitors as chemoprophylactic agents.
3. BCG vaccination and induced innate immune response
4. Malaria endemicity and role of Chloroquine.
5. Host blood and intracellular pH and factors influencing it.
6. Dietary practices controlling the host pH.
   This factor is unique as it has both negative and positive correlation for causation and prevention respectively.
7. Role of theoxanthine, theobromine, theaflavins and polyphenols in habitual tea drinkers.
8. Neem Bark Extract and use of neem stem as a toothbrush by 80 % Indians.
9. Law of Similia and Doctrine of friendly antipathy.
10. Agricultural works, and this signifies for those in rural areas/villages who work under sunlight for more than 3 hours in a day leading to immunity against infection with adequate levels of Vitamin D3.

Now to get a vaccine effect or more appropriately Cumulative vaccinia , the "Omne trium perfectum" or The Rule of Three or Golden ratio has to be applied which in simple terms implies that anything which comes in a set of threes is complete or perfect.[29](Vitaly Effimov, Quanta Magazine,1970) Effimov, a Soviet nuclear physicist proposed this theory in which trios of particles form a state of matter similar to Borromean rings, an ancient symbol of three interconnected circles in which no two are directly linked[30](Evelyn Lamb). This is much like *Tan, Man & Dhun* (body, mind & soul) This is much like *Tan, Man & Dhun (body, mind & soul) Trinity of Gender free Superhumane*.

The nesting doll feature, a discrete scale variance, arising out of symmetry in the equation describing the forces between the three particles, when spaced at certain distance apart, then the same particles spaced 22.7 times farther apart were also a solution (Pi).

This is how Cssemier Plates and Phenomenon in vacuum tells us, while extrapolating this behaviour of light and sound waves. [Vacuum Science and Technology" by Choudhury (for phenomena in a vacuum)].[31]

Equation



The Triads can also be broken into smaller intersecting Triads as:

Body: A healthy diet, exercise and relaxation.
Mind: Therapy, psychiatry and study
Spirit: Prayer, meditation and service to others
The Theory of threes can be further elaborated in regards to Quantum Theory as well as Law of Return and the Psychology theory of Thesis, Antithesis and Synthesis[32], which are beyond the scope of discussion in the present paper, as the author wants to avoid the bias of Philosophy for the sake of science protagonists.
Therefore, it will be sufficing to mention that the author is trying to demonstrate with his above mention of "Omne trium perfectum" or The Rule of Three or Golden ratio of TRINITY, in the current perspective, solely due to the rapid and significant responses observed with the synergistic effect of 3 factors when applied together on the study subjects. In the 2 conducted trials of global pandemic of Covid-19, which was in its accelerating phase with no respite of any relief from suffering, was visible in the near future.

The proposed ten factors are:

1. **Unique host miRNa and mutation in spike surface glycoprotein:**

Further to support the above theory a Comparative Analysis of SAR-CoV2 genomes from different geographies show different properties secondary to environment-host-virus interaction and exhibit unique infectivity, facilitation of transmission, virulence and immunogenic features. The gene-level mutational genome analysis identified several unique features of the genome SARS-CoV2;[33](Dinesh Gupta ICGEB, bioRxiv.21.03.2020) wherein the authors have shown a unique mutation in the spike surface glycoprotein (A 930 V)2435IC>T)) in the Indian SARS-CoV2 and the anti-viral host miRNAs may be controlling the potential virulence of the virus in the Indians. Furthermore, the role of NSP 14 protein (3'-5' exoribonuclease) as a proofreading key enzyme in the corona virus replication is discussed.[34]

A country-specific mutation will clarify the nature of the disease, the degree and timing of exposure to symptomatic carriers and therefore hold the key to a strategy of containment. The study, for example, found that the presence of unique mutations identified in Italy's genome is responsible for the sudden increase in the number of cases and deaths affected. The maximum mutations were seen in the Indian sequence, six. But, at outset, it seems to be less virulent and has less survival in host. Therefore, both the environmental and host factors are operating.

So again, coming to the relative immunity of population in India till (5th May, 2020), where around 46000 cases have been reported with 1583 deaths in a population of 1.37 billion, as compared to overall global figure of more than 35 lakh cases with around 2.43 lakh deaths. Thus residing in a country where the environmental factors are favoring mutations that make the virion less virulent is a protective factor in itself. Again explaining and conforming to diversity protection theory which we discussed earlier (of Diversity Pedagogy Theory)[35].

But as of now no existent mutant strain of Covid-19 has been detected which can bring about lethal mutagenesis of virus in the host cell and prevents its further replication or become totally avirulent due to some error catastrophe leading to extinction of Covid-19. Thus, this factor may not apply now and has also not been used by the author in the subjects under trial, to confer a protection in the 'integrated vaccine of 3 factors' but the author hopes that this factor will become operational when there will be 11 quasispecies of covid-19,(analogous to M-Strings[36]) in M-theory it is eleven-dimensional (ten spatial dimensions, and one time dimension) coming together in a defined geographical area.

2. **Lethal mutagenesis and Clathrin Inhibitors as chemo prophylactic agents:**

Clathrin. a protein forms coated vesicles. Coat-proteins, like clathrin, in order to transport molecules within cells. Cells accumulate metabolites, hormones, and other proteins through the infolding of plasma membrane vesicles through the receptor-mediated endocytosis. Clathrin binds the ligand to its receptor.

In nature, viruses are the smallest microorganisms. They are involuntary parasites, and without a host they cannot survive or reproduce and are associated with living creatures, including man. The common cold, chicken pox, influenza, dengue fever, AIDS, SARS, MERS and Covid-19 are viral borne diseases. By attaching to its host cell, the viruses hijack the cellular machinery to cause infections and further replication[37].

Ari Helenius started working with the Semliki Forest Virus (SFV) during the 1970s, a virus found in Uganda's mosquitoes which cause disease in man and animals.They further concluded that through the clathrin-mediated endocytosis pathway SFV

was entering cells. Helenius' research linked the virus story to the endocytosis case.

Scientists also recognized that endosomes vesicles mature during endocytosis cycle, and that the intraluminal pH of the vesicle goes towards acidic scale. Helenius and his colleagues did a second discovery in their SFV studies. They found that the decrease in pH of the vesicle caused conformational changes in the viruses (virions) of the SFV, allowing them to escape the vesicle and reach the cytoplasm of the cell, where they start replicating. If their observations were correct then they could inhibit the entry of SFV into the cells by preventing endosomal acidification. They used compounds in an experiment which prevented endosomal acidification and further blocked the invasion of SFV cells (Helenius et al. 1980). Its hypothesis was right to their surprise!

Phagocytosis may take up large particles, whereas macropinocytosis occurs in the absorption of fluid. Mechanisms independent of the coat protein clathrin and the fission GTPase, dynamin, will endocytize multiple charges. Most internalized cargoes are delivered by clathrin- or caveolin-coated vesicles or tubular intermediates known as clathrin- and dynamin-independent carriers (CLICs) derived from the plasma membrane to the early endosome as shown in figure 2 below:

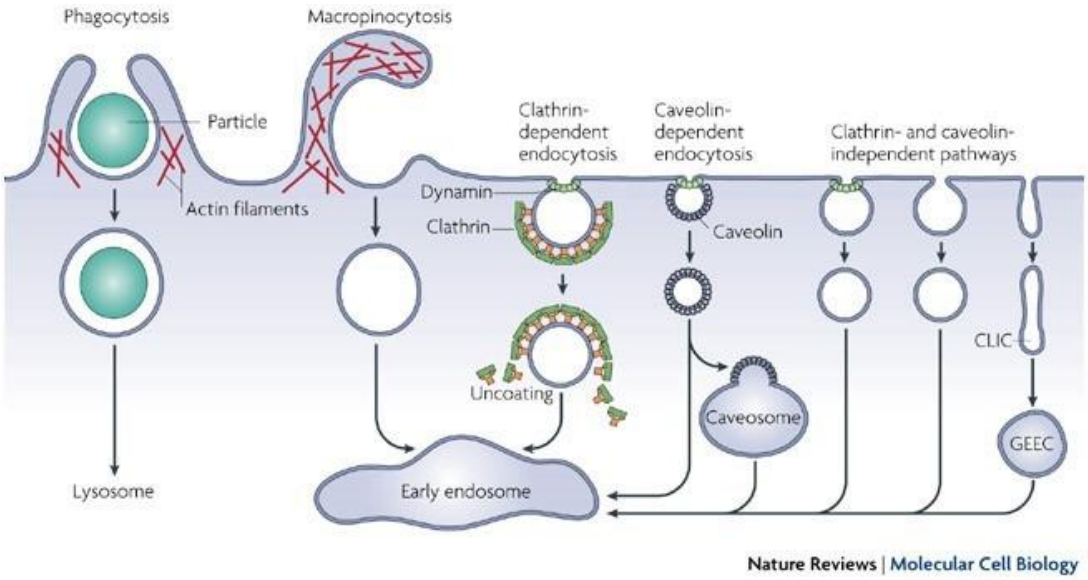


Figure 2: Viral entry pathways into cells

Source publication © 2007 Nature Publishing Group Mayor, S. & Pagano, R. E. Pathways of clathrin-independent endocytosis. Nature Reviews Molecular Cell Biology 8, 603-612 (2007) doi:10.1038/nrm2216.
Clathrin-mediated endocytosis:

The endocytesis mediated by clathrin is a pinocytic pathway. Clathrin forms triskelions consisting of three strong chains of clathrin, and three light chains. The triskelions are formed into a polygonal lattice, helping to shape the plasma membrane into a covered pit (Figure 3).

It is suspected that clathrin-dependent endocytosis is involved in cellular responses induced by TGFβ.[38]

Clathrin-dependent endocytosis has been shown to inhibit a variety of compounds. Which involve methyl-β-cyclodextrine (β-CD), phenothiazine, monodansylcadaverine (MDC), chloroquine (Wang et al., 1993), monensin, hyperosmotic sucrose, and dynasore. β-CD prevents endocytosis based on clathrin by removing cholesterol selectively from the plasma membrane. Hydrophobic amines such as phenothiazines, MDC and chloroquine inhibit endocytosis based on clathrin. Monensin is a monovalent ionophore that dissipates a gradient of the proton inhibiting clathrin-dependent endocytosis. Hyperosmotic sucrose prevents endocytosis which is reliant on clathrin by preventing contact between clathrin and adapters.

Coronaviruses (CoVs) in the order Nidovirales are enveloped RNA viruses of the family Coronaviridae. They are able to host a large variety of species of mammals and avians. We often cause illness in the respiratory and/or intestinal tract. The main causes of common cold (e.g., HCoV-229E and HCoV-OC43) are human coronaviruses (HCoVs). However, the advent of new zoonotic HCoVs has shown the ability of CoVs to cause life-threatening disease in humans, as shown by the SARS-CoV epidemics of 2002/2003, MERS-CoV in the Middle East, and now Covid-19 almost globally. The well-studied Mouse Hepatitis Virus (MHV) is a model to study CoV infections as a healthy model.[39]

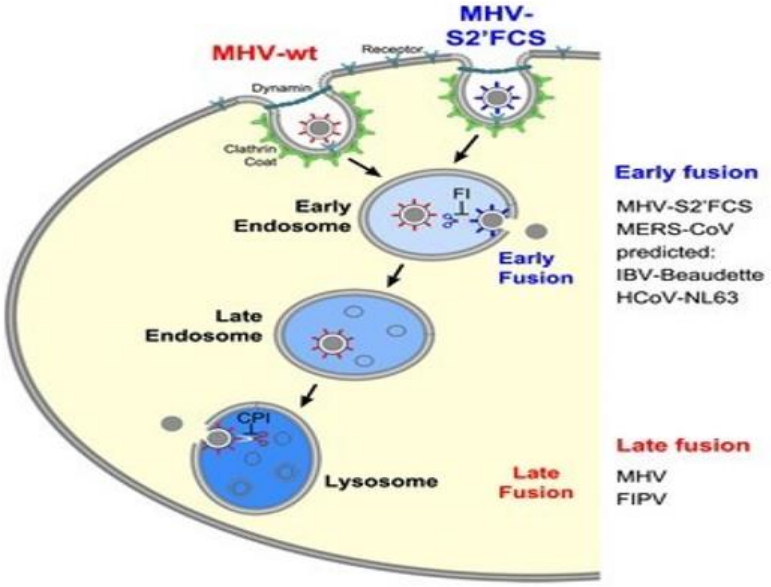


Figure 3. Model of early and late coronavirus fusion.

Source publication:
https://doi.org/10.1371/journal.ppat.1004502.g012

Mutation has arisen for adaptation. Some are detrimental, and short-term fitness of a population will be impaired by elevating mutation rates. The concept of lethal mutagenesis for curing viral infections is based on this phenomenon. Ribavirin is an example of this property of viral containment. The theory of error catastrophe further supports this.[40]

Chemical mutagens were used to artificially increase error rates in various RNA viruses, including vesicular stomatitis virus, type 1 human immunodeficiency virus (HIV-1), type 1 poliovirus, foot-and - mouth virus, lymphocytic choriomeningitis virus, Hantaan virus and hepatitis C virus. The viral titers were drastically reduced and even extincted in few cases. Thus, lethal mutagenesis with various drugs seems to have value in theory and also to be biochemically feasible.

The most populations can be overwhelmed by lethal mutagenesis. The time period in which lethal mutagenesis occurs is theoretically considerably shorter than the time scale generally applied to processes such as Muller's ratchet, one of the few other extinction mechanisms that can work in fairly large populations. Viral extinction can occur at two levels: (i) clearance of infection within a single host or (ii) extinction of the virus across the host population.

Mean equilibrium fitness level decreases exponentially with rate of deleterious- mutation. A population that is subject to a sustained, increased level of mutation, fitness will typically decline over several generations until a new equilibrium will eventually be reached. With each succeeding generation, mutations accumulate.

The mutation rate U can be subdivided into Un, purely neutral mutations, and Ud, mutations with a (deleterious) fitness effect, and write $U = Un + Ud$.The mean fitness at equilibrium ($\bar{w}$) is simply the Poisson fraction of mutation-free genotypes (not counting neutral mutations), $\bar{w} = e-Ud$

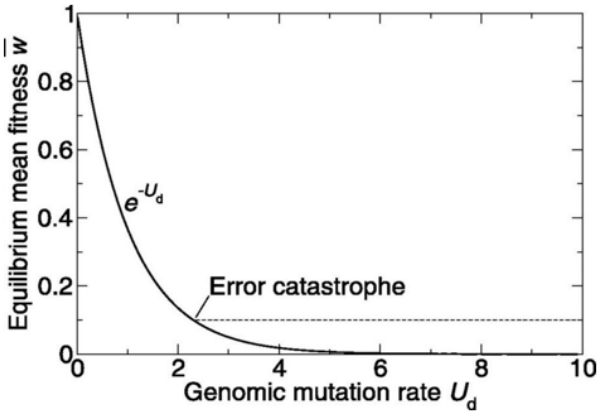


Figure 4. Equilibrium means level of fitness in function of the deleterious-mutation rate Ud. The solid curve is which is the equilibrium for all models where there is or has not been an error catastrophe. The dashed line is the mean fitness level for the simple Eigen model in which the best genotype has a fitness level of 1.0 and all mutants have fitness levels of 0.1 beyond the error catastrophe. (No mutations to the back are allowed). The mean fitness levels in models without error thresholds decline to arbitrarily small values for high mutation rates, whereas an error catastrophe slows down this decline and sets a lower bound on the mean fitness level of the population in the simple Eigen model.

Source publication: Section of Integrative Biology, The University of Texas at Austin, Austin, TX 78712 E-mail: cwilke@mail.utexas.edu.

The infection's ecology determines if the result is extinction or survival through its effect on the number of offspring, Rmax, but the genetics behave the same. Second, mortal mutagenesis is normally gradual decrease.

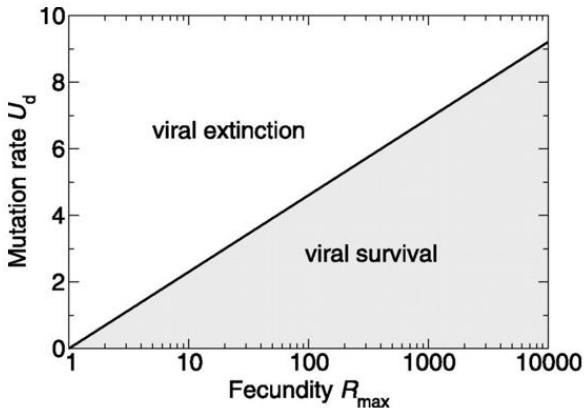


FIG. 5. Threshold of lethal mutagenesis by mutation rate Ud and maximum fecundity Rmax, from inequality 3. The relationship is log linear and changes in rate of mutation has an exponential effect on extinction than changes in fecundity.

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Several authors have proposed using certain mutagens to use lethal mutagenesis to cure or control RNA virus infection. Typically, RNA viruses have small genome with most containing about a dozen or so proteins. There were no human coronavirus (HCoV) treatments or vaccines currently available. The 2002-2003 outbreak of the Extreme Acute Respiratory Syndrome Associated Coronavirus (SARS-CoV) and the appearance of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in April 2012 warned of the high possibility of future zoonotic appearance of HCoV causing serious and lethal human disease. Additionally, SARS-CoV 's resistance to ribavirin (RBV) suggests the need to identify new targets for CoV replication inhibition. CoVs express a nonstructural protein 14 (nsp14-ExoN) 3'-to-5' exoribonuclease needed for high fidelity replication and retained throughout the CoV family. Both genetic and biochemical evidence support the theory that nsp14-ExoN has a role to proofread the RNA. Therefore, it hypothesized that ExoN is responsible for RNA mutagens resistance to CoV. It was shown that while wild-type (ExoN+) CoVs were RBV and 5-fluorouracil (5-FU) resistant, CoVs lacking ExoN activity (ExoN-) were up to 300 times more sensitive. ExoN- CoVs treated with 5-FU showed both increased sensitivity during multi-cycle replication and decreased specific infectivity, consistent with 5-FU as a mutagen. Comparison of the next generation full-genome sequencing of 5-FU treated SARS-CoV populations showed a 16-fold increase in the number of mutations within the ExoN- population relative to the ExoN+ population. Ninety per cent of these mutations accounted for transitions from A: G and U: C, consistent with 5-FU incorporation during RNA synthesis. These findings are direct evidence that behaviour of CoV ExoN provides a vital proofreading role during replication of viruses. In addition, these studies recognize ExoN as the first viral protein separate from the RdRp that specifies the responsiveness of mutagens to RNA viruses. Lastly, these findings show the value of ExoN as an inhibition target, and indicate that ExoN activity small molecule inhibitors may be possible pan-CoV therapy in combination with RBV or RNA mutagens.[41]

Coronaviruses (CoVs) are assembled before exocytosis by budding to the lumen of the early Golgi complex. The small protein CoV envelope (E) plays roles in assembly, release of the virion, and pathogenesis. CoV E has a single hydrophobic domain (HD), is aimed at Golgi membranes and has in vitro activity on the cation channels. The E protein from avian infectious bronchitis virus (IBV), which includes residues in the HD, has drastic effects on the secretory system. The authors of this study present evidence indicating that the monomeric form of IBV E correlates with an increased Golgi luminal pH., IBV infection or expression of IBV E induces neutralization of Golgi pH, supporting a model in which IBV E alters the secretory pathway by interacting with host cell factors, This is the first example of an alteration caused by coronavirus in secretory pathway microenvironment.[42]

A retrospective look at 568 patients in Wuhan. All of them were confirmed positive and on mechanical ventilation, median age 68, 63% male. 520 of them had standard of care (various antivirals and antibiotics), and in addition 48 patients were treated with 200mg hydroxychloroquine (b.i.d.) They measured hospital stay, mortality, and (interestingly) (Interleukin) IL-6 levels as well. And their results were quite striking: mortality was 18.8% in the HCQ group and 45.8% in the others. That's significant. Patient IL-6 levels declined significantly in the treatment group, but not in the other cohort.

The same cytokine pathway is the basis of HCQ's use in Rheumatoid Arthritis(RA) and lupus: suppressing cytokine signaling in the immune response. One can appreciate that this mechanism has nothing to do with viral replication. And zinc is necessary for HCQ to have any effect. It is also crucial to give HCQ as early as possible in the disease, and that studies that have shown no effect have failed because only severely ill patients were being treated. But this one has only patients on ventilators, in very bad shape indeed. In fact, if this IL-6 mechanism has something behind it, dosing early could be a bad idea – you probably don't want to turn down cytokine signaling and immune response at first, just later on, when it gets to be a problem. (Derek lowe)

Thinking about that disease course question, Indian Council of Medical Research has suggested that HCQ be given prophylactically to healthcare workers, and a study testing this is underway in the UK. We have, though, a possible source of data already, that is, the many RA and lupus patients who have already been taking the drug. The Italian Rheumatological Society (SIR) has been collecting data on just this question from 1,200 physicians there. The article says that there are 65,000 patients in Italy taking HCQ chronically and that only 20 of them have tested positive for the virus. Its significant.[43]

So, in this paper, potential drugs 5 Flouro Uracil, which can bring lethal mutagenesis of the Covid-19, Clathrin Inhibitors – phenothiazines -Largectyl (used as lytic Cocktail), chloroquine and Dynasore have been proposed as potential candidates to target virus genome of Covid-19. Out of these Chloroquine and Hydroxychloroquine sulfate (HCQ) has been tried in various ongoing trials with variable degree of protection in people less than 60 years of age and to be avoided in cardiac patients due to its toxicity.

The most robust mechanism to prevent viral replication and to bring about lethal mutagenesis above the error catastrophe is the change in intracellular pH by preventing acidification at endocytosis site in host cell. Thus, again emphasizing the fact

that if we keep host cell pH at 7.45 or above, then these drugs acts as vaccine against covid-19.

3. BCG vaccination and induced innate immune response:
BCG, or Bacillus Calmette-Guerin, is a vaccine for tuberculosis and is administered at birth in countries that have historically suffered from the disease, such as India. Many rich nations like USA, Italy and Holland never had a universal BCG vaccination policy. The recent study has revealed that "incidence of Covid-19 was 38.4 per million in countries with BCG policy compared to 358.4 per million in the absence of such a program[44].There was also a significant impact on mortality in those infected.
Other protective host factors discussed in detail include the BCG Vaccination induced T-cell mediated immunity by CD4+ cells and consequential Gamma Interferon and Interleukin-1B in providing immunity against virus in populations of India and Japan where it is universal.

An Indo-US team of researchers have revealed that Indians carry more NK-cells that can detect and terminate infection at an early stage and that Indians acquired the activating KIR-receptors (Killer cell immunoglobin receptors) genes as a result of natural selection to survive environmental challenges.

The non peer reviewed study from the authors of New York Institute of Technology, reveals that 55 middle and high income countries in the world that have a current BCG universal immunization policy had 0.78 deaths per million people, whereas middle and high income countries that never had a universal BCG policy (5 countries-Spain,France, United States, Italy and Netherlands)) had a larger mortality rate , with 200-630 deaths per million people, a significant variation[41]. Several studies have demonstrated the powerful immune response of BCG vaccination against leprosy and bladder cancers over the years. Japan with BCG policy since 1947, has shown a low mortality rate despite not implementing strict social isolation. Whereas Iran, with high number of deaths has been giving BCG coverage since 1984, therefore population above 36 years of age is vulnerable. From above study, it seems quite reasonable to predict the trend of Covid-19 infectivity and virulence in India. So, those who are immunized with BCG are protected from severe covid-19 to a significant extent but not fully. As the author propose that this protection, if combined with any 2 of other factors confer almost 100% immunity against covid-19 as seen in the 3000 member community under study, where not a single case of infection with covid-19 has been reported despite the prevailing and rising trend of community transmission in the same city of Agra, India.

4. Malaria endemicity and role of Chloroquine:
Also noteworthy is the that Covid-19 pandemic had less mortality in Malaria endemic zones and that the anti-malarial drug Chloroquine and Hydroxy-Chloroquine Sulphate were the potential treatment recommended by US-FDA to control the viral replication inside the host. The above conjectures have a role to be further explored. Moreover, South Korea significantly reduced the lethality of coronavirus by prescribing a chloroquine diphosphate salt + zinc treatment combo to block COVID-19 viral enzyme at 500 mg per day of chloroquine + zinc for 10 days. Below is shown the mirror image phenomenon observed in malaria endemic zones and covid-19 spreading habitat.

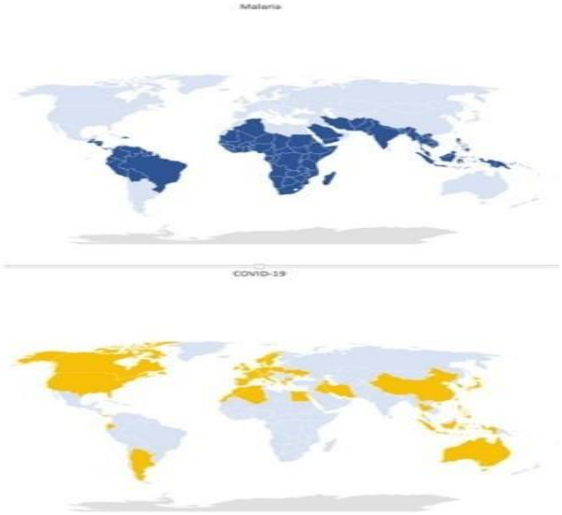


Figure 1 - Blue/Yellow countries where respectively Malaria (top) and COVID-19 (bottom) have caused more than 0.1 deaths per million inhabitants (sources: Ourworldindata.org (Malaria) and Worldofmeters.info (COVID-19), 14 March 2020)

Source publication:[46] www.Worldometers.info

Looking at the mechanism of Chloroquine action, it will be appreciated that it being a weak base, increases the endosomal pH required for the virus-host target cell fusion. Increase in the pH disrupts the function of lysosomal enzymes and normal virus function. Corona group of viruses require acid pH to fuse with the host cell membrane can no longer do so. It thus prevents the reunion of virus genome with the target host cell and halt the infection in its primitive stage. The action of Chloroquine on ACE2 (a surface receptor found on host cell) terminal glycosylation which leads to the morphological change and disruption in association between Covid-19 and target host cells as it requires ACE 2 receptor to attach to a cell. This pathophysiology is used with Chloroquine a potential prophylactic drug against Covid-19, just like a post exposure or even pre-exposure prophylaxis done in Rabies and HIV. The mechanism of zinc ions influx into host cell cytoplasm is

important with mutating corona viruses multiplication inhibition as they adhere to the RNA dependent RNA polymerase of the corona virus. The prophylactic dose of Chloroquine in Malaria is 500 mg once a week in adults and 8.3 mg per kg once a week in children will also be effective against Covid-19 prophylaxis.[44]

The relative immunity of the patients to Covid-19, suffering from auto-immune disorders like Rheumatoid Arthritis and SLE,who are on long term HCQ, is also a new finding observed in a pilot study on 50 patients by the author . This preamble and the role of human blood and intracellular pH in prevention as well as treatment of Covid-19 infection and virulence respectively is discussed extensively in the next sections, where the dietary factors and aging phenomenon affecting the pH are discussed in detail.

5. **The role of host blood and intracellular pH** in the alkaline range against protection from Covid-19 and the dietary factors further controlling the pH as exemplified in a case observational study by the author in a population of 3000 people is discussed.

Falling pH with aging

The systemic acid-base equilibrium changes with aging in normal adult humans, as reviewed in the published article reporting the acid-base composition of arterial, arterialized venous, or capillary blood in age-identified healthy subjects.[47] The authors extracted or calculated blood hydrogen ion concentration ([H+]), plasma bicarbonate concentration ([HCO-3]), blood PCO2, and age, and computed a total of 61 age-group means, distributed among eight 10-year intervals from age 20 to 100 years. Using linear regression analysis, they found that with increasing age, there is a significant increase in the steady-state blood [H+] ($p < .001$), and reduction in steady- state plasma [HCO-3] ($p < .001$), indicative of a progressively worsening low-level metabolic acidosis. Blood PCO2 decreased with age ($p < .05$), in keeping with the expected respiratory adaptation to metabolic acidosis. The decline in age related GFR is mostly attributable to this diet dependent increase in Hydrogen ion concentration, particularly due to Western style dietary habits. 26 articles published from 1934 through 1982 were used in this analysis on effect of diet on acid-base balance of humans and its effect on body systems. But it has been overlooked by most including the present scientists working to contain Covid-19.

Differences in sex: and why Covid-19 is sparing women around the world?

Gender-related differences in blood pH also has a profound role to play in Covid-19 pathophysiology. Women have lower values of serum [HCO3] than men, but they also have lower values of blood [H+] (i.e., higher values of blood pH) than do men. The pattern on Gender bias seen in Covid-19 current pandemic shows that men seem harder hit by the virus than women and are more likely to have severe illness or die. At least in the United States, it seems that men are less likely to seek out testing for the virus when they feel sick.

Data from around 1.5 million tests done in the U.S. show that the majority of people tested, 56%, were women. Of those women, 16% tested positive for the virus. In contrast, only 44% of the tests were done on men. And 23% of them tested positive."It gives us an idea about how men often don't present in the health-care delivery system until they have greater symptomatology.

Effect on kidney:

It seems that age related decline in kidney function is possibly due to accumulation of dietary acids and it is vicious cycle. Lindeman et al., 1985 has shown that those who customarily eat low acid-producing diets, or even base-producing diets likely confer protection from age related acidogenesis. Considerations of the physiology and pathophysiology of elderly people with co morbid conditions which produce metabolic or respiratory acidosis like Diabetes, Chronic kidney disease, Chronic liver disease, Ischemic Heart disease, Chronic Pulmonary Disease or Sepsis etc. should take this into account in Covid-19 infection prevention in this vulnerable group as observed by the author of this paper.

The reduction in muscle mass with aging is also a consequence and contributor to the above effect. The rate of degradation of skeletal muscle proteins is accelerated in metabolic acidosis. Correction of acidosis by administration of exogenous alkali as the sole experimental maneuver reverses the accelerated proteolysis (Papadoyannakis et al., 1984). American diets are net acid-producing in that renal excretion of acid exceeds that of base, and, when measured directly, net endogenous acid production is positive (Lennon et al., 1966; Kleinman and Lemann, 1987). Counterbalancing a normal diet- related endogenous acid production rate with a dietary absorbable base supplement can attenuate or reverse the deleterious effects the acidic pH of blood causes in promoting Covid-19 replication inside host cell. As done by the author in the study group of 55 SARI patients of the pilot study, who were given systemic alkalisers in addition to the high pH diet to prevent Covid-19 manifestation or persistence in the host despite exposure.

6. Dietary practices controlling the host pH:

As is evident and could never be forgot by mankind that how a diet of animal source (bat) provided the opportunity for the fatal animal virus to destroy human races, with particular reference to sea food diet which originated in Wuhan of China .Similarly the high mortality seen in most European countries and USA also points towards the prevailing western dietary habits in these countries, which are acidic in nature, and therefore more opportunity for covid-19 spread and virulence. This is in contrast to typical Indian diet which is less acidic and those communities where the alkaline diets are part of social-cultural-dietary habits, the covid-19 is hardly observed as is the case of community studied in the study arm of pilot study on 3000 residents by the author.

To maintain optimal blood steam pH, a diet rich in alkaline forming foods such as green leafy vegetables and fruits and limit or eliminate highly acid forming foods such as cheese, meat, chicken and fish. Yogurt and butter milk are alkaline forming foods despite having low pH. Raw milk is alkaline forming. Tea, coconut, corn, avocados, asparagus, broccoli, ripe bananas, garlic, apricots, soybean, nuts and seeds, watermelons and tofu are good alkaline foods.

Change in modern eating habits has increased net human's acid load. Industrialization over the last 200 years has produced a net dietary decrease in potassium (K) compared to sodium (Na) and an increase in chloride compared to bicarbonate. The ratio of potassium to sodium has reversed, K/Na previously was 10 to 1 whereas the modern diet has a ratio of 1 to 3. It is generally accepted that agricultural humans today have a diet poor in magnesium and potassium as well as fiber and rich in saturated

fat, simple sugars, sodium, and chloride as compared to the per-agricultural period[48]. This results in a diet that may induce metabolic acidosis leading to gradual loss of renal acid-base regulatory function with aging and further increase metabolic acidosis as a vicious cycle. A low-carbohydrate high-protein diet with its increased acid load results in very little change in blood chemistry, and pH, but results in many changes in urinary chemistry. Urinary magnesium levels, urinary citrate and pH are decreased.[49]

The drinking water pattern has changed significantly in urban India as compared to the rural area and countryside. The majority of city dwellers are now consuming the R.O. (water purified by reverse osmosis) water, which has a low tds (total dissolved solutes), with consequent low pH. As compared to ground water consumed by people of low and middle socioeconomic status residing in villages or suburbs, which has a high tds and higher pH. This could be one more reason for the observation seen in difference of Covid-19 prevalence between rural and urban India. When we compare the drinking water quality in Western world, particularly Germany, where people love to drink spring water or soda water. Thus a very low mortality seen in Germans.

The modern day lifestyle result in excessive acid stress and the pH of the blood falls to a threshold level, when bone will disassemble, releasing phosphates and calcium into the bloodstream to stabilise pH. A state of chronic inflammation is set in with up regulation of Vitamin D. This emergency reaction will continue until excessive free calcium can be buffeted primarily with protein, and the pH corrected[50].

A reliable marker for acid/alkaline status is the chloride/phosphate ratio. Chloride is the prime acid ion in the blood while phosphate is the dominant alkaline anion. A rise in the ratio above 30:1 is consistent with an increasing tendency toward acid stress, and calcium imbalance. A ratio of 25-27:1 is consistent with an alkaline tendency, balanced calcium metabolism. Value more than 30 warrants active lifestyle correction and detox advice if more than 32.

High ratio apparently produce Vitamin D deficit picture. But it becomes prudent to resolve the dietary habits before supplementing Vitamin D. Alkaline urine pH produced by alkaline diet is a good indicator. So, it would be prudent to consider an alkaline diet to reduce morbidity and mortality of Covid-19 particularly in aging population. An alkaline diet includes more fruits and vegetables and complete abstinence of an animal diet.

Therefore, it can be appreciated that it is not a single factor either in the virus or in humans, which can bring about a magic remedy to control the global pandemic by Covid-19, but rather a diversity of factors as propagated in the hypothesis "FIGHT DIVERSITY WITH DIVERSITY AND SURVIVAL OF THE FITTEST"[51]

7. Role of the Theoxanthine, theobromine, theaflavins and polyphenols in tea drinkers:

Dr Li Wenliang, the China hero doctor, who was punished for telling first the truth about the new epidemic in China and later died due to it, had documented in his case files and proposed a cure that could significantly decrease the impact of the Covid-19 virus on human body. The chemicals Meyhtlxanthine, Theobromine and Theophylline found in Tea have the property to wane off the effects of corona virus in the body and throat. The irony here is, had the Chinese administration listened to this great doctor' timely warning there would have been not a slightest need to write this and many other hundreds to thousands of research papers on Covid-19, an entity newly termed.

The main protease in novel Corona viruses, called 3C-like protease (3CL pro) has been identified as an attractive drug target[50]. Of the 720 natural products screened in this study, tannic acid and TF2B were identified using the HPLC proteolytic assay to inhibit 50% of the proteolytic activity of 3CLPro at concentrations ≤10 μM. Both tannic acid and TF2B belong to the group of natural polyphenols found in teas and inhibit proteases including tissue type plasminogen activator (TPA) and plasmin activity[53].Teas are broadly classified into 3 main types- green tea, black tea and oolong tea. In evaluating different types of tea, we found that extracts from several different types of tea, including Puer and black tea, could inhibit 3CLPro activity while green or oolong tea could not. Methylxanthines and catechins were not able to inhibit it[54]. Clarke et al reported that the aflavins were able to neutralize bovine coronaviruses[55], an interesting observation as we have noticed the enteric persistence of Covid-19 and pathogenic material in stools of the patients for up to 5 weeks after the patients respiratory samples were tested negative for SARS-CoV2-2 RNA[56].

Looking at the consumption of black tea in India and particularly in the study group of 3000 subjects who consumed 50 ml of black tea four times a day , and not a single infection has been reported in this group , despite the fact that it had hundred subjects who were high risk contacts of the positive Covid-19 patients prove in the preliminary stages the prophylactic role of black tea in a dose of 50 ml at 6 hourly interval daily against novel Corona virus infection. One important observation becomes necessary to mention here is that poor Indian migrant labour of a magnitude of, more than 3 million, which had moved in masses from high infected zones and hot spots of Indian cities to villages after the outbreak in India had to date not shown any sign of infection or community transmission and thus villages are moreover immune to Covid-19 and one important factor common in these groups is heavy and frequent tea consumption. One other factor, which is common in this group is a traditional Indian practice of using Neem tree stem (Azardirachta indica L) as a toothbrush as well as tooth paste since ages, keeping in view the fact that Neem tree is ubiquitous in India. This is discussed as the next important factor in community prevention and transmission against Covid-19 in Indian population.

8. Neem Bark Extract and use of neem stem as a toothbrush by 80 % of Indians: Neem (Azardirachta indica) ingredients are applied in Ayurveda, Unani, Homoeopathy and Modern medicine for the treatment of many infectious, metabolic or cancer diseases. This tree is very common in India. It has got complex of various constituents including azadirachtin, nimbin, nimbidin, nimbolide and limonoids and they play a role in disease management through modulation of various genetic pathways. Quercetin and beta Sitosterol are polyphenolic flavonoids from fresh leaves of neem. It is anti-inflammatory, anti-oxidant, free radical scavenging property and a good anti-viral drug, particularly the neem bark extract[57]. Results showed that neem bark (NBE) extract significantly blocked HSV-1 entry into cells at concentrations ranging from

50 to 100 µg/mL. Furthermore, blocking activity of NBE was noticed when the extract was preincubated with the virus but not with the target cells suggesting a direct anti-HSV-1 property of the neem bark.

Leaves extract of neem (Azadirachta indica A. Juss.) (NCL-11) has shown virucidal activity against coxsackievirus virus B-4 as suggested via virus inactivation and yield reduction assay besides interfering at an early event of its replication cycle[58].

The use of neem in various formulations is very common in rural and suburb India and includes neem oil as an anti-diabetic and anti infective, anti septic concoction usually derived from its seeds. The neem stem including its bark is used as a mouth cleanser or tooth brush by more than 80% Indians. It is this socio-cultural practice prevalent in India which has provided a unique anti-viral and anti-inflammatory property to common Indian villager against Covid-19, thereby acting as an vaccine. The same has been proven beyond doubt, when more than 3 million labour migration from cities to villages took place in April 2020 in India amidst lockdown period and not a single case was reported.

Taking cognizance of above observation, the author gave the same neem bark extract (NBE) to the hospitalized 50 high risk population patients who presented with severe acute respiratory illness, and all turned out to be covid-19 negative by RT-PCR after the intervention. Thus proving beyond doubt the protective role of NBE against covid-19, though the scientist may confirm this observation by conducting randomized controlled trial.

9. Law of Similia And Doctrine of Friendly Antipathy

"Disease is born of like things, and by the attack of like things people are healed".

Hippocrates integrated the law of similars into his Materia Medica of 139 remedies. He says. *"The majority of themaladies may be cured by the same things that cause them.*" According to author, the common suffering men is the ultimate judge and master of any medical pathy or treatment plan and not those who are in power of medical profession. The problem of covid-19 and its cure is the most serious problem confronted by every practitioner of medicine at the present day. It must be kept in mind that Covid-19 is not a disease of a single organ or tissue, rather it produces variety of different pathologies in various organs and the immune system to which the sufferer had an encounter and which manifest as a disease which is different in every other patient, taking into consideration the physical or mental generals of a particular patient or individual who has been exposed, from birth until to-day.

The author's approach to conquer the covid-19 is based on the scientific fact that any derangement of a system, organ in an individual is very specific to that particular person an does not apply to all persons who have been exposed to the same insult, as the harmful effect of the common insult which manifests as a Covid-19 infection and disease symptoms in one individual and not all those who are exposed to that insult is due to the fact that the constitution of that particular patient has served as a fertile soil for the virus to grow. How the soil became fertile, for viral replication is the substance of this paper and **Law of Similia**. The same principal guides the perfect remedy which will bring about the prevention and protection from Covid-19 as the author explore the subject. The remedies used by the author are ***Pyrogenium*** and ***Arsenic album***. Pyrogenium is a nosode which has been prepared form decomposed, chopped lean beef in water and standing in sun for two weeks and then potentized. In 200 potency given daily in serious life-threatening corona virus infection. Arsenic album 30 can be taken as a prophylactic medicine against corona virus infections. It has been recommended a dose of arsenic album 30, daily on empty stomach for three days, and repeated after a week for 7 weeks.

The approach the author is taking about will also retard the progression of serious covid- 19 syndrome and cytokine storm in proven cases. Life events like the death of a loved one, bereavement, mental and physical oppression, phobia or fear, victim of war, or family dispute, sexual perversions, feeling of guilt or inferiority complex, heightened ego are some of the triggers and must be properly recorded during history taking of the patient as they will guide to select the curative remedy which fits with early life events which may be physical or mental particulars.

Therefore, you will appreciate that it not merely the health or social events which makes an individual susceptible to acquire covid-19 infection, but there exists a state of germ generation inside a host for the novel corona virus entry and replication, some time before the appearance of this pandemic, which has developed in a particular person's constitution solely arising out of a significant or an insignificant life or global event.

The author will call officials or doctors as blind, when they refuse to admit the existence of an fertile constitution or a life event in a pre-pandemic phase and thus miss a grand opportunity or a hint provided by mother nature to rectify and bring cure to the suffering patient and relief to the family. Nothing happens without a cause, though we may not be able to trace it. The trouble with the modern allopathic approach towards Covid-19 is that they are looking, or developing or administring, a specific drug which will cure all cases that is why they are not successful most of the times in developing a vaccine or cure.

It has been proved conclusively that a rapidly advancing Covid-19 pandemic could be changed into an equally rapidly receding one by administering an internal remedy, which can bring happiness and renewed hope by averting the suffering. The immense importance of our pathy as the greatest stimulator of the medicatrix nature cannot be must be forcibly emphasized. The patients who were habitually treated homeopathically compared to those who have their recuperative forces or vital force kept in efficient action (and which can in no other way can this be so effectively done) are far less likely to become victims of this malignant disease. (**Doctrine of Recuperation of Covid-19 prophylaxis).** Crazy Healers. How to Cure Cancer [Internet]. YouTube; 2019 Dec 29. Available from: https://youtu.be/8U1rtt2UYyw?si=cDz8r5Uz01MC-cz_

Therefore author has come up with an Integrated Covid-19 vaccine doctrine based on the scientific facts, for the benefit of mankind and for those who keep the wisdom before knowledge, The important principal of human physiology in 'cytokine storm syndrome' seen in serious covid-19 disease and which often results in death of the patient is in reality an expression of exaggerated biological and chemical forces which are at work to counter the more dangerous constitutional enemy, acting as a relief to the system. thus, over a period of time, this so-called friend becomes a danger to life by the abnormal proliferation of the cells or chemicals. (Doctrine of Friendly Antipathy). much akin to the nuclear reactor which is built to provide energy in a controlled manner but once the chain reaction becomes haywire, and causes vast devastation as seen in Chernobyl tragedy.

The above analogy is given here to emphasize again the fact that it is indispensible in covid-19 cure to know the cause which ignited this chain reaction. The cause can be physical, mental or a chemical insult, must had been forgotten or happened unnoticed, but needs to be discovered by any means, because none other proving of the agent than the one, which triggered this chain reaction can stop this uncontrolled reaction in totality.

10. **Agricultural workers and this signifies** for those in rural areas/villages and special communities in urban areas, who work under sunlight for more than 3 hours in a day. Sunlight promotes the synthesis of Vitamin D in humans. People with normal level of this have strong immune system. Moreover, people who work in a closed environment, in urban areas are more likely to breathe air shared with someone as compared to agricultural workers who work in farmlands. This is reflected in the Covid-19 cases so far observed in India, where not a single case has been reported from a village or rural areas. This is further validated by a observation in a study group of a community whose 3000 members living in an urban area but working in agriculture fields for more than 3 hours under sunlight did not report a single Covid-19 infection. Of course, other factors are also operational in this group, such as pure vegetarianism with consumption of less acidic diet and increased intake of tea, (4 times per day).

Vitamin D deficiency is associated with severe form of Covid-19 infection as reported by researchers from the School of Medicine at Trinity College, Dublin, Ireland in collaboration with the University of Liverpool. They studied effects of severe vitamin D deficiency in Northern Hemisphere countries and the inflammatory response to Covid- 19 infection. Furthermore, why there is low mortality in countries that lie below 35 degrees north latitude[59]. Similarly , in the above mentioned community of around 3000 residents called as Dayalbagh (Garden of Love or Garden of the Merciful) where it is mandatory to work in sunlight for at least 6 hours daily for every member including new borne 4 weeks onwards, no single case of covid-19 has been reported ,as the disciplined community followed the instructions of their Spiritual Leader and Mentor Prof. Prem Saran Satsangi Sahab (Waqt Sant Satguru), who has made it compulsory for every resident to work in open agricultural fields much before the onset of pandemic in Wuhan, made wearing of a helmet and mask as a part of human body as early as 30th January 2020 and even forecasted much before the scientific observation of Trinity College researchers that Vitamin D3 protects against Covid-19 infection.

The author would like to mention here one very important aspect of patient care in the modern hospitals and ICU's which are devoid of sunlight exposure. This observation has arisen from a comparison with care provided to Covid-19 positive patients in the old Nightangle wards, which are few but still in existence in India, when they were established by the ruling British around 100 years ago and they had witnessed the Spanish Flu pandemic and the care provided in them about 100 years ago. The old hospitals with Nightangle wards have a better outcome from the viral syndrome for both patients and healthcare workers as compared to closed and compact, compartmentalized modern day ICU's. The SARI patients in study group were treated in similar Nightangle wards by the author as compared to control group patients, which were treated in modern design ICU and wards.

So , this important architectural and building design observation by the author, and the mortality being observed due to Covid-19 in doctors and healthcare workers providing care to the novel corona virus patients globally including the modern hospitals in United States , Italy and United Kingdom should make us rethink and restructure our hospitals, with the old Nightangle design of patient wards with large sash type windows bringing in fresh air and open ventilators with sunlight shining in the wards , to be still the best model of hospital wards as opposed to air conditioned, closed and negative pressure rooms of the present times. Sunlight boosts resistance to infections, with older studies suggesting potential roles for surface decontamination as well.[55] Again, we should ponder on the 1952 Copenhagen epidemic of poliomyelitis, which gave birth to Intensive Care Units and role of ventilators (positive pressure ventilation) in reducing the mortality (by approx.30%) [33]. Why, we have not been able to reduce the mortality rate, as desired in covid-19 infected individuals in developed nations like USA, Italy and Spain, as compared to India, South Korea, Japan and lately China, despite use of Ventilatory support. The answer lies probably in the design of wards and ICU's where the care is being given, whose internal closed air has a high viral retainership, thus affecting the outcome. The large spacious and open Isolation wards in India with high ceiling and large windows probably is helping more in keeping the mortality rate low rather than ventilatory support system. Again, this observation needs to be scientifically validated by controlled trials. But it seems pertinent to mention here that designing hospital buildings to allow increased exposure to sunlight and outdoor air will be beneficial for the occupants of such buildings. The data in review is much from pre-antibiotic era, but with no definitive treatment in hand and risk to healthcare personel in current pandemic merits the consideration of building designs.

To exactly delineate the relative impact of individual factors on the prophylaxis against Covid-19 infection, author recommends further randomized case-control studies in the groups with common factors operating for the sake of academicians. However, from humanity's point of view and breaking the chains of **S-E-C-D factors**, the time required to undertake and conclude such studies will be at the cost of more human lives, which are more precious than the satisfaction of pure academicians and peer reviewing.

Observations and Results

Though this trial has been undertaken with the primary Aim and Objective, of primary as well as primordial prevention of viral borne Severe Acute Respiratory Illnesses, such as COVID-19, the interesting observations during this trial which are however very significant for other such acute virus borne pandemics, such as COVID-19 are also being presented here for the benefit of Human-kind at large :-

I. Short-Term Pilot Study: PISCOV Trial (pH based Integrated SARS CoV-2)

Study Design- Double Blind Controlled Interventional Trial.

-Population: 110 patients with severe acute respiratory illness (SARI) of less than 10 days duration.

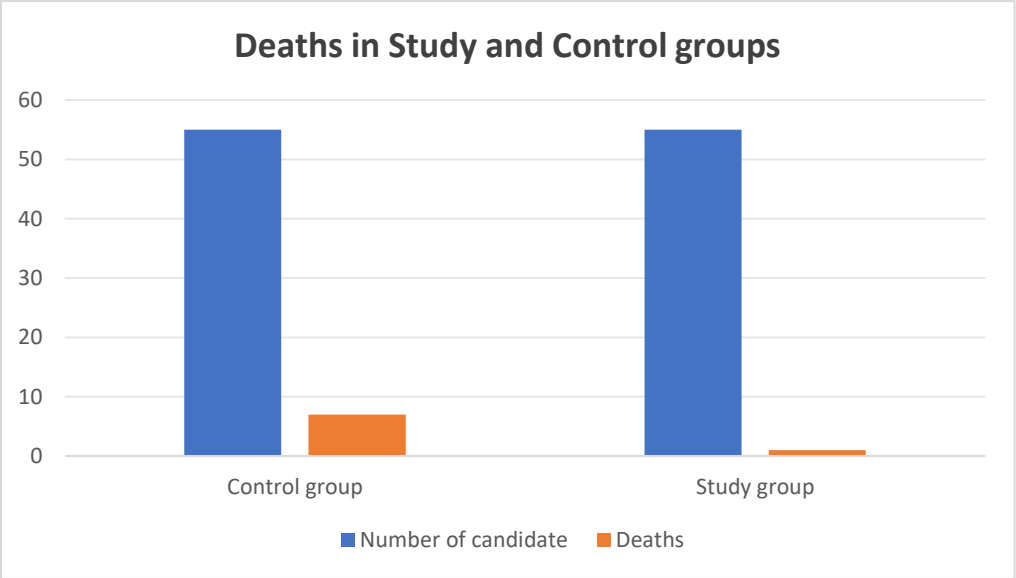
- Location: Isolation wards of a hospital in Agra, experiencing community transmission of COVID-19.

- Groups: Study group (n=55) and Control group (n=55).

- Intervention: Post-Exposure Prophylaxis (PoEP) consisting of 3 protective factors as listed in Material and Methods (out of 10 listed factors) for 10 days.

-Test Method: RT-PCR (Reverse Transcriptase Polymerase Chain Reaction) for COVID-19 on throat and nasal swabs.
-Study Group Outcome: None of the patients turned out to be COVID-19 positive on RT-PCR test.
-Risk Profile: 80% of study group cases were high-risk close contacts of proven COVID-19 patients and infected healthcare workers.
- Antibody Response: Detection of IgM/IgG antibodies to SARS-CoV-2 observed in study group patients.
Control Group Outcome:
- Seven deaths occurred in the control group of proven COVID-19 patients who were not exposed to modifiable protective factors before contracting the infection.

Parameters	Control group	Study group
Number of candidates	55	55
Deaths	7	1
Average Blood pH	<7.35	>7.40
Antibodies (IgM to Covid-19)	Absent	Present
RT PCR	Positive	Negative



Inference: -

Thus, exposure to protective factors in the Study group prevented mortality in SARI (severe acute respiratory illness) case series (PISCOV TRIAL) due to early antibody response (IgM positivity) after contracting the Covid-19 infection, thus providing positive correlation of pH based protection of exposed Covid-19 cases with the protective factors providing immunity from severe illness, in the proposed hypothesis of pH based integrated SARS CoV-2 vaccine (PISCOV) effect. The average pH in the study group was more than 7.40 as compared to less 7.35 in control group.

Outcome	Study Group	Control Group
Deaths	1	7
Survived	54	48

Odds Ratio (OR)
Odds Ratio is calculated for binary outcomes. Here, we consider the death outcome.
Deaths:
Study Group: 1 deaths, 54 survived
Control Group: 7 deaths, 48 survived
The formula for OR is:
OR=(a/c)(b/d)
Where:
a is the number of deaths in the study group (1)
b is the number of deaths in the control group (7)
c is the number of survivors in the study group (54)
d is the number of survivors in the control group (48)
OR=(1/48)(54/7)=**0.127**

An odds ratio (OR) of 0.127 indicates that the event of interest is significantly less likely to occur in the exposed group compared to the non-exposed group. Specifically, an odds ratio less than 1 suggests a protective effect of the exposure.
To interpret this more precisely:
- If the OR is 0.127, it means that the odds of the event occurring in the exposed group are only 12.7% of the odds of it occurring in the non-exposed group.
- This implies an 87.6% ~ (88%) reduction in the odds of the event occurring due to the exposure (calculated as 1 - 0.127 = 0.873).

Relative Risk (RR)
Death Outcome
Data:
Study Group: 1 death out of 55 patients
Control Group: 7 deaths out of 55 patients
The formula for Relative Risk (RR) is:
RR=Risk in Study Group / Risk in Control Group
RR= (1/55)/(7/55)= 1/7= **0.143**

The Relative Risk of 0.143 suggests that the risk of death in the study group is 14.3% of the risk in the control group. This indicates a significant reduction in the risk of death due to the intervention.

Test the Significance: -

To test the significance of the observed differences between the study group and the control group, we used the Chi-Square test for independence for categorical outcomes. Specifically, we can use it for both the death outcome and the RT-PCR positivity outcome.

Death Outcome

Data:

- Study Group: 1 death, 54 alive
- Control Group: 7 deaths, 48 alive

We'll use a Chi-Square test to determine if the difference in death rates between the two groups is statistically significant.

RT-PCR Positivity Outcome

Data:

- Study Group: 0 positive, 55 negative
- Control Group: 55 positive, 0 negative

For this outcome, we can also use a Chi-Square test to determine the significance of the difference in positivity rates.

Chi-Square Test for Death Outcome

To perform the Chi-Square test, we will create a contingency table:

Deaths		**Alive**
Study Group	**1**	**54**
Control Group	**7**	**48**

Chi-Square Test for RT-PCR Positivity Outcome

The contingency table for RT-PCR positivity is:

Positive		**Negative**
Study Group	0	55
Control Group	55	0

We performed the Chi-Square tests for both tables.

Let's calculate these values.

Chi-Square Test Results

1. Death Outcome:
   - Chi-Square Statistic (χ^2): 3.37
   - p-value: 0.066
2. RT-PCR Positivity Outcome:
   - Chi-Square Statistic (χ^2): 106.04
   - p-value: (7.24 times 10^-25)

Interpretation

1. Deaths:

- The Chi-Square statistic of 3.37 with a p-value of 0.066 indicates that there is a trend toward significance but not quite reaching the conventional threshold of ($p < 0.05$). This suggests that while there is a difference in death rates between the study group and the control group, this difference is not statistically significant at the 5% level. It is close, however, indicating a potential meaningful difference that might be confirmed with a larger sample size.

2. RT-PCR Positivity:

- The Chi-Square statistic of 106.04 with a p-value of (7.24 times 10^{-25}) is highly significant. This p-value is far below the conventional threshold of ($p < 0.05$), indicating that the difference in RT-PCR positivity rates between the study group and the control group is statistically significant. The study group had a significantly lower rate of COVID-19 positivity compared to the control group.

Conclusion

- Deaths: There is suggestive evidence that the intervention may reduce the death rate among patients, but the result is not statistically significant at the 5% level. This suggests that further investigation with a larger sample size might be warranted to clarify the effect.

- RT-PCR Positivity: The intervention is highly effective in preventing COVID-19 infection as measured by RT-PCR, with a statistically significant reduction in positivity rates in the study group compared to the control group.

These results support the effectiveness of the intervention, particularly in preventing COVID-19 infection.

To calculate the effect of blood pH balance on the outcomes of the study, we need to examine the correlation between blood pH levels and key outcomes such as mortality, RT-PCR results, and antibody response in both the control and study groups.

Control Group

Number of candidates: 55

Deaths: 7

Survivors: 55 - 7 = 48

Average Blood pH: <7.35 (Acidic)

Antibodies (IgM to COVID-19): Absent

RT-PCR: Positive

Study Group

Number of candidates: 55

Deaths: 1

Survivors: 55 - 1 = 54

Average Blood pH: >7.40 (Alkaline)

Antibodies (IgM to COVID-19): Present

RT-PCR: Negative

II. Calculating the Effect of pH Balance on Mortality

Mortality Rate Calculation:

Control Group Mortality Rate = (Number of deaths in Control Group / Total Number of candidates in Control Group) * 100

Study Group Mortality Rate = (Number of deaths in Study Group / Total Number of candidates in Study Group) * 100

Mortality Rate:

Control Group Mortality Rate = (7 / 55) * 100 = 12.73%

Study Group Mortality Rate = (1 / 55) * 100 = 1.82%

Observations

The mortality rate in the Control Group is significantly higher than in the Study Group.

The Control Group has a lower average blood pH (<7.35), indicating acidosis.

The Study Group has a higher average blood pH (>7.40), indicating a more alkaline state.

Correlation Between Blood pH and Outcomes
RT-PCR Results:
Control Group: All RT-PCR tests positive.
Study Group: All RT-PCR tests negative.
Antibody Response:
Control Group: Absence of IgM antibodies.
Study Group: Presence of IgM antibodies.

Conclusion

Mortality and Blood pH: The control group with lower (acidic) blood pH had a higher mortality rate compared to the study group with higher (alkaline) blood pH.
RT-PCR and Blood pH: All control group patients with acidic blood pH tested positive for COVID-19, while all study group patients with alkaline blood pH tested negative.
Antibody Response and Blood pH: Control group patients with acidic blood pH did not develop IgM antibodies, while study group patients with alkaline blood pH did.

Contingency Table:

Group	Deaths	Survivors	Total
Control Group	7	48	55
Study Group	1	54	55
Total	8	102	110

Chi-Square Test for Independence
The chi-square test statistic is calculated using the formula:
$\chi 2 = \sum (Oi - Ei)2 / Ei$
Where:
·**Oi** are the observed frequencies
·**Ei** are the expected frequencies, calculated as
Ei=(row total × column total)/grand total
Contingency Table with Expected Frequencies

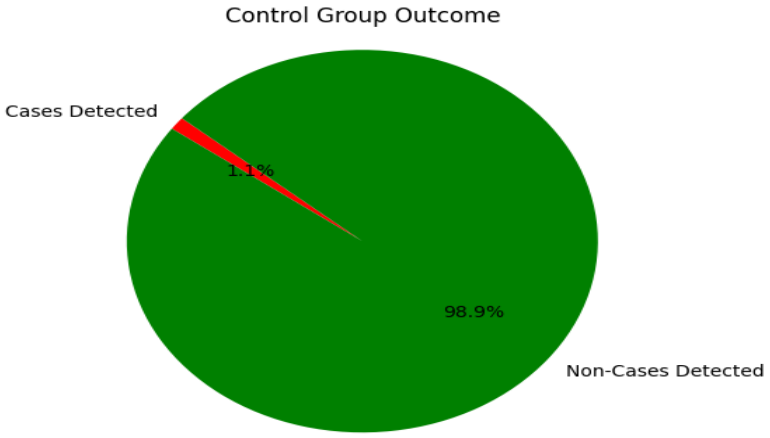
Group	Deaths (Observed)	Deaths (Expected)	Survivors (Observed)	Survivors (Expected)
Control Group	7	4	48	51
Study Group	1	4	54	51

Chi-Square Calculation
$\chi 2=(7-4)2/4 + (1-4)2/4 + (48-51)2/51 + (54-51)2/51$
$\chi 2=2.25+2.25+0.176+0.176 = 4.852$
Degrees of Freedom
The degrees of freedom for this test is:
df=(rows−1)×(columns−1)=(2−1)×(2−1)=1
P-Value Calculation
Using the chi-square distribution table or a chi-square calculator, we can find the p-value for $\chi 2=4.852$ with df = 1
$p \approx 0.0276$

Conclusion
Since the p-value (0.0276) is less than the conventional significance level of 0.05, we reject the null hypothesis. This means there is a statistically significant difference in mortality rates between the control group (with acidic pH <7.35) and the study group (with alkaline pH >7.40).
Thus, the alkaline pH (>7.40) in the study group is significantly associated with lower mortality compared to the control group.

III. Observational Case Series:
- Population: Around 3000 community members.
- Location: Community setting.
- Intervention: Pre-Exposure Prophylaxis (PrEP) of more than or equal to 3 listed protective factors acting as natural vaccine.
- Protection Rate: 99.9996666667% observed.
- All study group subjects had a history of low pH diet consumption habits, exposure to sunlight for more than 3 hours a day as an agricultural workers and protective action of Theoxanthine, Theobromine and Theoflavins and Polyphenols as tea drinkers and teatotallers.

Control Group outcome-
- Total Cases of COVID-19 Detected: 33 cases (1.1% of the control group).
- Insight for Regression Model: Provides insight into the proposed hypothesis for regression model analysis of the 10 protective factors.



Contingency table:

	COVID-19 Cases (Yes)	COVID-19 Cases (No)	Total
Study group	0	2967	2967
Control group	33	0	33
Total	33	2967	3000

Protective Factors:
1. Unique host miRNA and mutation in spike surface glycoprotein.
2. Lethal mutagenesis and Clathrin Inhibitors.
3. BCG vaccination and induced innate immune response.
4. Malaria endemicity and role of Chloroquine/ Hydroxychloroquine (HCQ).
5. Host blood and intracellular pH and factors influencing it.
6. Dietary practices controlling the host pH.
- Unique factor with both negative and positive correlation for causation and prevention, potentially negating other protective factors.
7. Protective action of the theoxanthine, theobromine, theaflavins, and polyphenols in tea drinkers.
8. Neem Bark Extract (NBE) from Neem tree (Azardirachta indica) and use of neem stem as a toothbrush by 80% Indians.
9. Law of Similia and Doctrine of Friendly antipathy of Cytokines.
10. Agricultural workers, specifically those in rural areas/villages who work under sunlight for more than 6 hours a day, leading to immunity against COVID-19 with adequate levels of Vitamin D3.

These protective factors will be analyzed in a regression model to understand their individual and collective impact on COVID-19 immunity.

Key Observations and Message for Prevention in the above 2 Observational cum Experimental studies:

1. Preventive Measures from Observational cum Experimental Studies:
- The two studies provide crucial insights for preventing deadly diseases globally.
- The outlined theory gains significant support from the findings.

IV. Secondary Lethal Bacterial Pneumonia as a cause of Death in Covid-19 hospitalised patients:
- Observation: More COVID-19 serious hospitalized patients suffered and died due to secondary lethal bacterial pneumonia, notably by Gram-Negative bacteria (with Klebsiella sp. being the most common).
- Risk Factors: Debilitation, diabetes, immunocompromise (acquired or inherited), and existing periodontal disease causing pathological fermentation in the mouth leading to acidification of oral cavity pH, which favors COVID-19 infection.
- Impact: This observation underscores the importance of addressing bacterial pneumonia as a significant complication of COVID-19.

3. Diagnostic Challenge:
- Issue: Treating doctors worldwide are primarily focused on COVID-19 and innovative treatment strategies, potentially leading to a lack of routine bacterial cultures of throat and sputum.
- Consequence: Important diagnoses of bacterial etiology for pneumonia are being missed, despite being curable with available antibiotics.
4. Treatment Strategy:
- Author's Intervention: Combination of Aminoglycoside with third-generation cephalosporin (Ceftazidime) or Penicillin (Piperacillin).
- Outcome: Cured 48 out of 50 interstitial pattern pneumonia cases.

Conclusion:
These findings emphasize the necessity of a comprehensive approach to combatting COVID-19, including the prevention of secondary bacterial pneumonia and the importance of routine bacterial cultures for proper diagnosis and treatment.

V. Observational Pilot Study on Relative Immunity of Patients with Autoimmune Disorders.
The relative immunity of the patients to Covid-19, suffering from auto-immune disorders like Rheumatoid Arthritis and SLE,who are on long term HCQ, is also a new finding observed in a pilot study on 50 patients by the author.
- Population: 220 patients suffering from autoimmune disorders such as Rheumatoid Arthritis and Systemic Lupus Erythematosus (SLE).
- Medication: Long-term use of Hydroxychloroquine sulfate (HCQ).
- Objective: To assess the relative immunity of these patients to COVID-19 infection.
- Findings:
- Observation: Patients on long-term HCQ therapy for autoimmune disorders exhibited relative immunity to COVID-19 infection.
- Implication: This observation suggests a potential protective effect of HCQ against COVID-19 in patients with autoimmune disorders.
- Significance:
- Novel Finding: The observed relative immunity provides new insights into the potential role of HCQ in preventing COVID-19 infection in vulnerable populations.
- Clinical Relevance Understanding the protective effects of HCQ in autoimmune patients could inform treatment strategies and contribute to COVID-19 prevention efforts.

This pilot study highlights the need for further research to explore the mechanisms underlying the observed immunity and to evaluate the potential use of HCQ as a preventive measure against COVID-19 in autoimmune patients.

The interesting observation which the author would like to mention here is that Covid-19 infection runs a chronic progressive debilitating course in more than 50 % of those infected with a syndrome similar to Autonomic syndrome with increased incidence of Interstitial Lung Disease, Cardio-vascular disease and Sudden Cardiac Deaths.

VI. Observational Study on SARI Causes and Outcomes: Clinical profile, etiology, outcome and
new-onset diabetes: A SARI case series SARI case series data has shown significant association with Diabetes Mellitus, including new-onset diabetes thus figuring out the major
SARI case series data has shown significant association with Diabetes Mellitus, including new-onset diabetes thus figuring out the major Pathophysiological association of COVID-19 with

glucose metabolism and has a bearing on the pathogenesis, treatment, and outcome of COVID-19 infection and perpetuity of pandemic of this magnitude. Here we raise concern for the first time about the growing association of an infectious pandemic with the lifestyle disorders which are non-communicable diseases but carry with them the potential of fertile soil for rapidly spreading epidemics.

The etiology, clinical profile, treatment outcome, and mortality rate in different sub-groups of SARI cases in a tertiary care hospital and the incidence of new-onset Diabetes Mellitus in them and to investigate theoretically the hypothesis that maintaining normal glucose metabolism could prevent progression of a mild Flu-like illness (FLI) to a severe form of Severe Acute Respiratory Illness (SARI) and consequent complications such as Cytokine Storm Syndrome and Multi-Organ failure.

Discussion

The pH based Integrated SARS Cov-2 immunity with vaccine effect in humans is unique because, it is low cost, and can easily be administered or provided in the community, does not involve big pharmaceutical company or commercial corporate and specialized medical expertise. It emphasizes on Integrated approach of combining the best of modern medicine and diagnostics with Ayurveda, Homoeopathy, Naturopathy, Physical labor and vegetarianism. It signifies the doctrine that the plight of meddling with Nature can be mitigated by Nature itself.

To exactly delineate the relative impact of individual factors on the prophylaxis against Covid-19 infection, authors have undertaken randomized double-blind interventional case-control study with interim results published at 6 months duration, which commenced on 7th June, 2020 after obtaining approvals of regulatory authorities. The observations of PISCOV trial so far are very encouraging. However , from humanity point of view and breaking the chains of **S-E-C-D factors (**Socio-Economic-Cultural-Dietary**)** , the time required to undertake and conclude such studies will be at the cost of more human lives, which are more precious than the satisfaction of pure academicians and peer reviewing and henceforth the interim results and their impact as pre and post-exposure prophylaxis from Covid-19 infection by slight change of Blood pH towards more alkalinity are shared in this paper. Further if we make a generalization of this hypothesis of prevention by changing pH of blood and intracellular pH towards alkaline side, then this could be a future "Universal Vaccine" for protection against deadly viruses, capable of generating pandemics like Corona viruses, Influenza viruses like H1N1, HMPV, Dengue, Ebola and the latest threat of G4 as they all need acidic host environment to enter and replicate. And its application on mass scale is pragmatic and easy. Requires changes in dietary pattern, exposure to more sunlight, sweating, consumption of more natural products and life style culture which is more primitive and nature friendly. The authors have a experience of controlling viral borne epidemics of Dengue Fever and Chikungunya in a similar manner and approach[65].

The discourse also presented encompasses a vast array of topics ranging from ancient philosophical insights to modern scientific research. It reflects on the significance of practices like yoga, meditation, and spiritual exploration in fostering well-being and consciousness expansion. Furthermore, it delves into the integration of these practices with modern medicine, particularly in the context of palliative care and disease management.

The exploration of consciousness, both from spiritual and scientific perspectives, is particularly intriguing. The discussion touches upon the biochemical and physical changes that accompany prayer and meditation, emphasizing their potential impact on health and well-being. Moreover, it draws parallels between metaphysical concepts and quantum physics, suggesting a deep interconnections between spirituality and the fundamental nature of reality.

The research work on the "PISCOV Trial" introduces an innovative approach to pandemic prevention, proposing a pH-based immunity strategy. The hypothesis of "Survival of the Flattest" challenges conventional notions of "Survival of the Fittest," suggesting that humility and adaptability may play a crucial role in survival, both at the individual and societal levels.

The authors have also done research on role of Adrenaline hormone Opium 1M[64] in the development and control of life style disorders through the paper titled "A pilot study to assess the effect of Adrenalinum 3X on short term and long-term complications of lifestyle disorders like Hypertension, Cancer, Diabetes, Anti-Social Behaviour, Anxiety & Depression".[21] Also supporting the notion of "Survival of the Flattest". Along with the ongoing study on Lacto-vegetarian diet.

In essence, the discussion highlights the importance of integrating ancient wisdom with modern scientific understanding to address contemporary challenges. It underscores the potential of interdisciplinary collaboration in exploring the complexities of human consciousness, health, and societal resilience.

While the study outlined above aims to investigate the effectiveness of the pH-based Integrated SARS-CoV-2 Immunity intervention, it is important to acknowledge several limitations.

Conclusion:

Based on the probable statistics, we can draw the following conclusions:

Mortality Rates:

1. **Acidic vs. Alkaline pH:**

- Chi-Square Statistic: 4.852
- Degrees of Freedom (d*f*): 1
- P-Value: 0.0276

Conclusion: Since the p-value (0.0276) is less than the conventional significance level of 0.05, we reject the null hypothesis. This indicates a statistically significant difference in mortality rates between the control group (acidic pH < 7.35) and the study group (alkaline pH > 7.40). Therefore, an alkaline pH (> 7.40) in the study group is significantly associated with lower mortality compared to the control group.

2. **General Comparison of Death Rates:**

- Chi-Square Statistic: 3.37
- P-Value: 0.066

Conclusion: The p-value (0.066) is greater than the conventional significance level of 0.05, suggesting a trend towards significance but not reaching it. This implies that while there is a difference in death rates between the study and control groups, this difference is not statistically significant at the 5% level. It is close to being significant, indicating a potential

meaningful difference that might be confirmed with a larger sample size.

RT-PCR Positivity:

- Chi-Square Statistic: 106.04
- P-Value: 7.24×10^{-25}

Conclusion: The extremely low p-value (7.24×10^{-25}) is far below the conventional threshold of 0.05, indicating a highly significant difference in RT-PCR positivity rates between the study and control groups. The study group had a significantly lower rate of COVID-19 positivity compared to the control group.

Overall Conclusions:

The interventions of the PISCOV trial are highly effective in preventing COVID-19 infection as measured by RT-PCR, antibody response, with a statistically significant reduction in positivity rates in the study group compared to the control group. These results support the effectiveness of the intervention, particularly in preventing COVID-19 infection. While there is suggestive evidence for a reduction in mortality rates, this effect was not statistically significant, and further research is needed to confirm this potential benefit. A statistically significant difference in mortality rates between the control group (acidic pH < 7.35) and the study group (alkaline pH > 7.40) was observed. Therefore, an alkaline pH (> 7.40) in the study group is significantly associated with lower mortality compared to the control group.

The study highlights the importance of integrating ancient wisdom of highest form of Transcendental Meditation (Surat Shabda Yoga) with modern scientific understanding to address contemporary challenges. It underscores the potential of interdisciplinary collaboration in exploring the complexities of human consciousness, health, and societal resilience.

The research work on the "PISCOV Trial" introduces an innovative approach to pandemic prevention, proposing a pH-based immunity strategy. The hypothesis of "Survival of the Flattest" challenges conventional notions of "Survival of the Fittest," suggesting that humility and adaptability may play a crucial role in survival, both at the individual and societal levels. The "Survival of the Flattest" in the metaphorical sense, suggest that individuals with humility and politeness are more likely to navigate and sustain life in difficult times , like natural disasters, infectious pandemics, life style disorders, environmental societal and professional challenges effectively.

Some other modern researches supporting the "Theory of Survival of Fittest" include

1) Humility and Leadership: Research in organizational psychology has shown that leaders who exhibit humility and politeness are more effective in fostering collaboration and trust within teams. Such leaders are more adaptable to changes and inspire loyalty, enabling sustainable success[60].
2) Politeness in Negotiations: Studies in conflict resolution and negotiation highlight that individuals who approach discussions with politeness and respect are more likely to achieve win-win outcomes. This approach builds rapport and reduces tension, making solutions more sustainable.[61]
3) Resilience and Adaptability: Similar to the "flattest" in evolutionary biology being robust to mutations, individuals with humble and polite backgrounds often demonstrate psychological resilience. Their adaptability allows them to thrive in challenging environments without resorting to confrontational or domineering behavior.[62]
4) Social Connectivity and Well-being: Humility and politeness strengthen interpersonal relationships by fostering empathy and reducing conflicts. These qualities create a supportive social network, which is crucial for mental health and long-term stability.[63]

Their approach not only ensures and sustain personal growth, but also positively impacts Humankind at large, creating environment conducive to collective physical, mental and spiritual upliftment to evolve the *Gender free Trinity (Tan, Man, Dhun) of Quintessential Harmony from Ab Aeterno to Ab Infinitum to evolve Superhumane*.

This paper conforms to the Almighty"*Theory of "Trinity of Arts, Science and Engineering upto the infinity*".

Ethical Committee:

Abbreviations

Name of the Ethics Committee	Status	Date of approval
Siddhartha Hospital Institutional Review Board	Approved	30/05/2020

PISCOV- pH Based Integrated SARS CoV-2

SARS CoV-2- Severe acute Respiratory Syndrome Corona Virus 2

NBE- Neem Bark Extract

Bd- Twice daily is known as "bis in die"

PoEP- Post-Exposure-Prophylaxis

PrEP- Pre-Exposure- Prophylaxis

RT-PCR- Real-time Reverse Transcriptase-Polymerase Chain Reaction

S-E-C-D- Socio-Economic-Cultural-Dietary factors

HCQ- Hydroxychloroquine

SFV- Semliki Forest Virus

CLICs- clathrin- and dynamin-independent carriers

MDC- Monodansylcadaverine

HCoVs- Human Coronaviruses

BCG- Bacillus Calmette-Guerin

HMPV - Human metapneumovirus

SARI- Severe Acute Respiratory Illness

Acknowledgement

We would like to extend our deepest gratitude to The Gracious Huzur for his unwavering support and inspiration throughout the course of this study. His guidance and encouragement have been instrumental in the successful completion of our research. We are profoundly thankful for his vision and leadership, which have motivated us to strive for excellence and make meaningful contributions to the field. This work is a testament to his profound impact on our lives and our scientific endeavors.

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Biography

Dr. Siddharth Agarwal is a distinguished General Medicine Physician, Diabetologist, and educator. He holds an M.B.B.S. from S.N. Medical College, Agra, and an M.D. in General Medicine from King George's Medical College, Lucknow. Dr. Agarwal has been associated with significant research projects with TB Alliance, USA, Georgia University, Sydney, Australia, and the Department of Science and Technology, MHRD, and Ministry of AYUSH, Government of India. He serves on the editorial board of two international journals and is an International Associate Member of the Italian Society for Hypnosis and Pain Management. At present he is Head of Department of Emergency Medicine at GMC Firozabad.

Dr. Agarwal has been invited to speak at various national and international scientific forums, including the University of Helsinki and the University of Waterloo. He is also a TEDx speaker and has received numerous awards, including the Chancellor's Medal for the best M.B.B.S. student and the Smt. Surat Kumari Lal Gold Medal for his M.D. work.

Dr. Sapna Agarwal, born on November 11, 1973, in Agra, India, is a distinguished Pathologist and educator. She earned her M.B.B.S. from S.N. Medical College, Agra, receiving a Gold Medal, and her M.D. in Pathology from King George's Medical College, Lucknow, where she was awarded a Gold Medal for her thesis on Cytopathology of Oral and Maxillofacial lesions. Dr. Agarwal is associated with Grace Pathology, Siddharth Hospital, and Saran Ashram Hospital, where she has been a leader in Pathology and Microbiology.

Her research spans Quantum Nanobiology, Biophotons in red blood cells, and Consciousness studies, collaborating with international institutions such as the University of Arizona and Christian Albright Universität. She has presented her research at multiple international conferences and has published extensively on holistic healing and consciousness. As an Honorary Lecturer and consultant pathologist at DEI(AYUSH), Dayalbagh, she teaches Chemistry and Zoology, specializing in alternative medicine and Ayurveda.

Shreyash Dayal is a BHMS (Bachelor of Homeopathic Medicine and Surgery) from the State Homoeopathic Medical College in Chherat, Aligarh and currently at Intern Doctor at District Hospital, Hathras. He is dedicated to pursuing a comprehensive education in homeopathic medicine, aiming to gain expertise in natural and holistic healthcare practices. With a strong academic background and a deep interest in alternative medicine, Shreyash is focused on mastering the principles of homeopathy. His current work revolves around the study of homeopathic remedies, patient care, and clinical applications of homeopathy, preparing him for a future career in this field.

Research Field

Dr. Siddharth Agarwal: Pain management, diabetes management, critical care medicine, spiritual healing, clinical hypnosis, tuberculosis research, consciousness studies, cardiovascular diseases, alternative medicine, meditation effects, adrenaline research.

Dr. Sapna Agarwal: Pathology, clinical diagnostics, infectious diseases, laboratory medicine, blood disorders, cancer pathology, medical education, molecular genetics, microbiology, immunohistochemistry, adrenaline research.

Shreyash Dayal: Homeopathic remedies, patient care, clinical homeopathy, alternative medicine, holistic healthcare, natural treatments, chronic disease management, herbal medicine, integrative medicine, preventive healthcare, adrenaline research.

Clinical Trial Details (PDF Generation Date:- Sat, 04 Jul 2020 04:32:22 GMT)

CTRI Number Last Modified on Post Graduate Thesis
Type of Trial
Type of Study
Design Public
Title of Study
Scientific Title of Study Secondary IDs if Any
Details of Principal Investigator or overall Trial Coordinator (multi-center study)
Details Contact Person (Scientific Query
Details Contact Person

CTRI/2020/05/025490 [Registered on: 31/05/2020] - **Trial Registered Prospectively**
07/06/2020
No
Interventional
Nutraceutical
Randomized, Parallel Group, Active Controlled Trial
A Clinical trial to study the efficacy of pH based Integrated SARS Cov-2 Immunity in Human Subjects.
PISCOV TRIAL (pH BASED INTEGRATED SARS CoV-2) IMMUNITY IN HUMAN SUBJECTS.

Secondary ID	Identifier
U1111-1252-7438	UTN
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