

“Importance of Medico-Physiological, Psychological As Well Immunity Boosting Capacity of Sustainable Social Rituals and Phyto-Chemicals, Concerned for Preventing Covid-19: a Survey and Case Study ”

Dr. Animesh Mondal 1, Dr. Sabina Pradhan 2, Sohini Dutta 3, Dr. Pradip Kumar Bandyopadhyay 4, Dr. Swapna Roy 5, Ms. Supriya Chakraborty 6, *Arup Ghosh 7,

¹Assistant Professor, Deptment of Botany, Banwarilal Bhalotia College, Asansol., Paschim Bardhaman, West Bengal, India

²Assistant Professor, Deptment of Botany, Banwarilal Bhalotia College, Asansol, Paschim Bardhaman, West Bengal, India

3.Intgr. M.Sc. Student, Dept. of Animal Science (Toxicology), Kaji Najrul University, Asansol, West Bengal, India

4. Associate Professor, Department of Botany, Burdwan Raj College, Purbo Bardhaman, India

5.Dr. Swapna Roy, AYUSH Medical Practioner and Consultant, Purbo Bardhaman, West Bengal, India,

6. Ms. Supriya Chakraborty, Technical Expert (Gerontology), KP Trust and Research Foundation, Burnpur, Paschim Bardhaman, West Bengal, India

7. Ex. Faculty, B. B.College, Asansol; Scholar, BBMK University, Dhanbad; Consultant Nutritionist and Health Educator, KP Trust and Research Foundation, Burnpur, West Bengal, India

E-mail address: 1st Author: animeshmondal.2001@gmail.com

2nd Author: psabina12@gmail.com

3rd Author: dsohini139@gmail.com

4th Author: drpkbbot@gmail.com

5th Author : swapnahazarroy@gmail.com

6th Author : chakrabortysupriya629@gmail.com

**7th Author: aghoshbbc@gmail.com , Corresponding Author*

Abstract:

An immune system prevents a body from attacks from various pathogen, during COVID-19 Pandemic for long time there was no effective therapeutic answer, from epidemiological science point of view there is only way to survive by growing 'Herd Resistance' in the community. It was a matter of glory and opportunity to the Indian people that ancient Indian medical science has ample of scope to grow immunity against any unknown pathogen through following different BARRIER IMMUNITY boosting mehtod.

One such Indian social rituals, the famous 'NAVARATRI' programme, an ideal example of sustainable and scientific culture, started simultaneously with 1st phase of Lock Down in India. A family was selected for the study. Before starting of Navaratri urine pH was measured of a targated person, it was 7.5, after exact 10 days again measured the pH of urine, showed pH 6.5. After getting this type of result, authors gathered the information along with videography related to the whole family. It was found that the targated person completely avoided alcohol during the Navaratri programme on the other side he used lots of fruit, vegetables (Antioxidant Enriched). From the study it has been revealed that such type of rituals is very useful and important for the development of immunity system in the general people.

Besides a very interesting positive result from an internationally repute personality, for preventing COVID19 attack (Therapeutics and Prophylactic) despite the sharing of same roof with a COVID19 attacked person by following the immunity boosting advisory.

Key Words: Covid-19, Herd resistance, Immunity, Navaratri, pH,

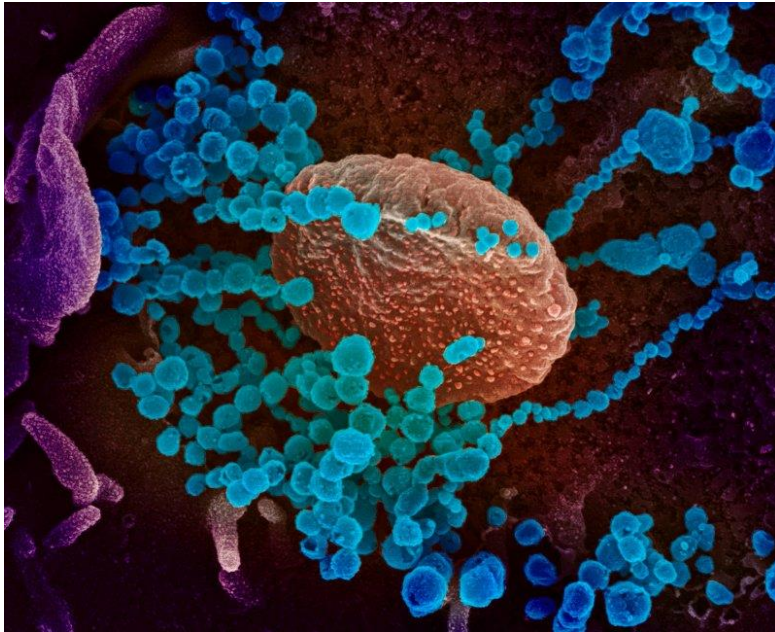
Introduction:

Epidemic, Pandemic and Endemic are the adjective of a same disease but applicable when different types of factors imposed on that.

In case of Novel Corona Virus i.e. COVID19 [Corona Virus Disease 2019 – 11th February by WHO] when it was confined within the China (Asia) it was as **EPIDEMIC**, when it was started to breakout to the different countries like Iran (Asia), Italy (Europe), Spain (Europe), France (Europe), Britain (Europe), New York (America) and too many other countries of different subcontinents – then it termed as **PANDEMIC** [WHO declared on 11 th March, 2020 (118,000 cases in 114 countries and 4291 lives were lost)] and if COVID19 follow the prediction of various experts that it will be global and seasonal permanently to some countries like Dengue Virus then it will be termed as **ENDEMIC**.

“The 2019 novel coronavirus has been officially named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the International Committee on Taxonomy of Viruses. The group noted the virus's genetic similarity to the SARS virus from 2002-3 but said there may be differences in disease spectrum and transmission”. [1]

Fig-1: Electron Microscopic Photograph of SARS-CO V- 2



“This image obtained on March 12 shows a scanning electron microscope image of SARS-CoV-2 (round blue objects) emerging from the surface of cells cultured in the lab, SARS-CoV-2, also known as 2019-nCoV, is the virus that causes COVID-19, the virus shown was isolated from a patient in the U.S.” -[9]

“ National Institutes of Health/AFP/Getty Images”

“**Coronaviruses** are a group of related RNA viruses that cause diseases in mammals and birds. In humans, these viruses cause respiratory tract infections that can range from mild to lethal. Mild illnesses include some cases of the common cold (which is caused also by certain other viruses, predominantly rhinoviruses), while more lethal varieties can cause SARS, MERS, and COVID-19. Symptoms in other species vary: in chickens, they cause an upper respiratory tract disease, while in cows and pigs they cause diarrhea. There are as yet no vaccines or antiviral drugs to prevent or treat human coronavirus infections.” [2]

It is first reported at the Wuhan province of China in the December, 2019 as epidemic, within very short period it has been converted to Pandemic.

“History of pandemic is not a new phenomenon to the world, it has been reported since very ancient time, The Greek physician Hippocrates, the "Father of Medicine", first described influenza in 412 BC” [3]

“A **pandemic** (from Greek , *pan*, "all" and *demos*, "people") is an epidemic of an infectious disease that has spread across a large region, for instance multiple continents or worldwide, affecting a substantial number of people. A widespread endemic disease with a stable number of infected people is not a pandemic. Widespread endemic diseases with a stable number of infected people such as recurrences of seasonal influenza are generally excluded as they occur simultaneously in large regions of the globe rather than being spread worldwide.

Throughout human history, there have been a number of pandemics of diseases such as smallpox and tuberculosis. The most fatal pandemic in recorded history was the Black Death (also known as The Plague), which killed an estimated 75–200 million people in the 14th century. Other notable pandemics include the 1918 influenza pandemic (Spanish flu) Current pandemics include COVID-19 and HIV/AIDS". [3]

Though there are so many viral diseases which have already been controlled by proper vaccine, e.g. Small Pox, Poliomyelitis, Measles etc. but till today there are no effective vaccine for viral diseases like AIDS, Dengue etc.

OBJECTIVE:

- 1. To Establish the Efficacy of Phyto-Chemicals to Prevent the Attack of any Pathogen including SARS-COV-2 virus**
- 2. To Establish "Strategic Health Management" is Equally Efficient, like any Ultra Modern Therapeutics or Vaccine, to Make Human Body Insusceptible to a Particular Disease by the Action of Sensitized White Blood Cells through Auto-Immune system of the Body.**
- 3. To Establish the Relevancy of Different Social Rituals those are Able Enough to Generate Insusceptibility of Human Body (an Eternal Power) Against any Pathogen or to Generate So Called Barrier Immunity (which is easy to explain by modern lifescience/biology).**

Considering the consequences and sufferings of common people, around the whole world specially for the people of the under developed countries, out of the viral diseases against which there is no provision of therapeutics and/or vaccine to the so called modern system of medical science (obviously confined to a specific school of medical service provider)

But that system has a specialized branch called EPIDEMIOLOGICAL SCIENCE, suggestion of that branch is maintenance of Social Distancing and Lock Down. This theory is applicable and fruitful when the case will remain limited within a bounded area i.e most of the people (60-70 %) of that bounded community will come in contact with the pathogen of the disease with in a period of 2-3 life cycle of the effected pathogen to create resistance in the 'HERD' (community) and within the calculated period (Quarantine period) all the virus/bacteria must have to be wiped

off by completing their life cycle without keeping out a single no. of pathogen career in the society. Then this system will be effective. [4, 8]

In the age of Global-Village concept this system is not at all effective as we have witnessed all around the world during COVID19 consequences. Days after days, month after month different countries have followed the formula of Epidemiological Science and getting result a big “ZERO”

It is nothing but the application of famous Darwin’s Theory of Natural Selection i.e. “SURVIVAL OF THE FITTEST”, meaning either you protect yourself by your own resistance power (Barrier Immunity i.e. Invulnerability of body) / survive by own barrier immunity and innate immunity (Creating Antibody) or go to hell by the chariot of death.

This is the simple calculation of that Social Distancing/Lock Down theory. Yet Those theory has significance for assessing the HOT SPOT ZONE, RED, ORANGE AND GREEN ZONE till today.

So the modern people have to search out a new universally acceptable mode of technique of survivability even for the exposure of any new or mutated strain of the existing pathogen, it needs to be revisited the significance of application of INVULNARABILITY, IMMUNITY power of the human body against those dreaded pathogen i.e. to give **more stress on ‘host’ rather than causative“pathogen”**

IMMUNITY is an universal fact not restricted for any particular disease or pathogen. In narrow sense some school of medical science make confusion with or better to say try to label this wider meaning of medical term with narrow meaning ANTIBODY formation phenomenon

immune

not susceptible or responsive

"**immunity**" the ability of an organism to resist a particular infection or toxin by the action of specific antibodies or sensitized white blood cells
protection or exemption from something. [5]

noun, plural im·mu·ni·ties.

1. the state of being immune from or insusceptible to a particular disease or the like.
2. the condition that permits either natural or acquired resistance to disease.
3. the ability of a cell to react immunologically in the presence of an antigen.

exemption from any natural or usual liability. [5]

MATERIALS AND METHODS:

To establish the hypothesis of the study two types of survey works have been followed. :-

- I. Qualitative Study (Unstructured Study) : Through which the facts and phenomenon can be described implicitly.
- II. Quantitative Study (Structured Study): Through which the study can be explained explicitly.

Ist Step: Qualitative Study (Unstructured Study):

During this study it has been tried to collect some information which were in practice by the eminent personalities during the then PANDEMIC situations in long past when there was absence of advance therapeutics or vaccine for the purposes.

- i. “Excerpts from -Plague’s Manifesto of Swami Vivekananda:
 5. Come, let us give up this false fear and, having faith in the infinite compassion of God, gird our loins and enter the field of action. Let us live pure and clean lives. Disease, fear of an epidemic, etc., will vanish into thin air by His grace.
 6. (a) Always keep the house and its premises, the rooms, clothes, bed, drain, etc., clean.
 - (b) Do not eat stale, spoiled food; take fresh and nutritious food instead. **A weak body is more susceptible to disease.**
 - (c) Always keep the mind cheerful. Everyone will die once. Cowards suffer the pangs of death again and again, solely due to the fear in their own minds.” [6]
- ii. Dr. R.G Kar, on whose name famous R.G. Kar Medical College in Kolkata, Wrote a book on “PLAGUE” describing the situations of 1899 -Plague-Pandemic in Calcutta.

Where Dr. Kar has described about the nursing and allied service rendered by famous **Margaret Elizabeth Noble, our beloved sister Nivedita**, during the plague epidemic in Calcutta in 1899, Nivedita nursed and took care of the poor patients. [7]

During that period sister Nivedita used to consume only **Fruits and Milk** for her feeding – It has also been supported through an article published in Daily news Paper. [10]

Quoting the above article another important and relevant information { by Shankha Adhikary } has been gathered ,“Punoya Smriti” by Shanta Devi, daughter of Ramananda Chattyopadhyay, that.

In the year 1919, 1st January, famous and beloved Rabindra Nath Tagore wrote a letter to the famous scientist, **Sir Jagadish Chandra Bose**, regarding a mixture of 5 – AYURVEDIC HERBAL REMEDY [Neem, Gulancha, Nishinda, Thankuni and Root of Banana] used for the Ashramik of Shaniketan during the seasonal Epidemic of Influenza and got a notable result [10]

- iii. Personal Interview with various elder personalities regarding their personal experiences during different Epidemic and Pandemic as follows.
 - a. One 77 years old eminent person expressed that during his childhood, he experienced sufferings of Small Pox Endemic several times, he exclaimed that during that period hundreds of people -village after village got fatality- in that what about your family and relatives? At the very morning in empty stomach, my father and grandmother used to pour few drops of extract of herbal mixture (don't know the ingredients detail, as I was not at the age to understand that) but I can only tell that taste of that drops was bitter, pungent, foul-odor i.e. every odd with that mixture also important along with that filtered water would be arranged by my father. Nothing odd has been happened with us despite of the overall horrible situations.
 - b. So many elder people expressed their experience during small-pox crisis :
 - Total avoidance and withdrawal of meat and fish in the whole community.
 - Use of bitter taste herbal product for feeding like tender NEEM leaf, karola etc.
 - If there is no digestive problem use of ghee for feeding purpose.

IInd Step: Quantitative Study (Structured Study):

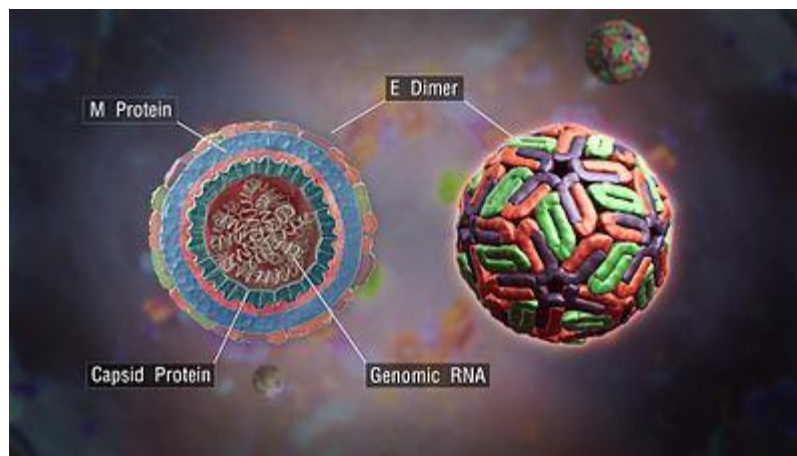
Since last few years different members of the authors' group are actively engaged with both formal and non-formal quantitative study on the Strategic Health Management and efficacy of Phyto-chemicals in different health ailments .

Authors have conducted a quantitative study on application of Bio-Organic Chemical Products for the contraction of Dengue Virus, DENV is the cause of dengue fever. It is a mosquito-borne, single positive-stranded RNA virus of the family Flaviviridae; genus Flavivirus. Four serotypes of the virus have been found, all of which can cause the full spectrum of disease. [11]

a.

In this case study Tapioca Root Powder Soup, for keeping body fluid steady by effective Hydration process along with Lemon Juice in warm Water (Blood PH Regulator) which kept platelet count steady were applied and reduced the fever. DNEV – viral load [DENGUE NS1 ANTIGEN TEST - Ag units] decrease down from 87 to 36.66 within a gap of 2-3 days simultaneously viral fever was also relieved within same period from 104⁰ C to 98⁰ C And got complete relief with normal Platelet count within six days. Details have been reported and presented in an International seminar.[11]

Fig. - 2 : Structure of DENV [16]



Use of *Azadirachta indica* in different health ailments is very common and popular in India and other Asian countries as folk treatments.[12]

In March 2020, several claims were published on Facebook which included pictures of neem leaves and their use in treating or alleviating COVID-19 related symptoms such as fever, cough, sore throat, and shortness of breath. These claims that neem leaves could be used as a treatment for COVID-19 circulated through Southeastern Asian countries such as Malaysia and India via social media.

Malaysia's Ministry of Health released an infographic titled "The usage of neem leaves for COVID-19 outbreak" in which they summarized the facts and myths related to the leaves being used to treat COVID-19. There is no clear evidence of the effectiveness of the leaves in treating infections, and only limited clinical studies have been conducted in determining their antimicrobial properties. [13]

Despite the above the authors have conducted various informal studies on effect of *Azadirachta indica*, it also given notable result. The efficacy of *Azadirachta indica* has scientifically been

supported by the following study to prove the development of insusceptibility of body to any pathogen.

An eminent scientist, Prof. Jayanti Das Sharma of Indian Institute of Science Education and Research (IISER), Kolkata, her work with Azadirachta on AUTO IMMUNE RESISTANCE SYSTEM OF THE BODY, which help to resist different diseases, like Multiple Sclerosis of Brain. She also reported that the same system is applicable to resist the SARS CoV-2 virus at the very root level, in that case it will not allow the virus to get enter into the body, so naturally there is no question of infection of COVID19 at all.

The research paper has been published in International Science Journal – “FRONTIER IN CELLULAR NEURO SCIENCE”. [14]

b. Case Study on ‘NAVRATRI PROGRAMME’ : By following all the advisory of WHO for Lock Down, a study was conducted on the rituals in detail by making videography of the full programme observed by the family.

The mentioned family consist of about 8-9 members of different ages, from 2 ½ years to about 58 years old aged person.

Authors have given special attention on the behavioral and psychological attitude of those members who are most sensitive and susceptible to the problem during the lock down period.

58 years old aged male member : i. :- he was addicted with alcohol and bidi (fired nicotine), before starting of lock down period i.e. on 24th March, 2020 he was suffering from cold, cough and flu problem.

ii. He was feeling uneasiness and suffering from cough problem, he was advised to maintain a safe distance and using musk.

iii. on 24th March, Bio-chemical test of his URINE was conducted by using urine testing PH paper – Reading showed PH :7.5 [Alkaline – reflection of unsafe level – i.e. body is more susceptible to pathogen] -- [Fig.-3]

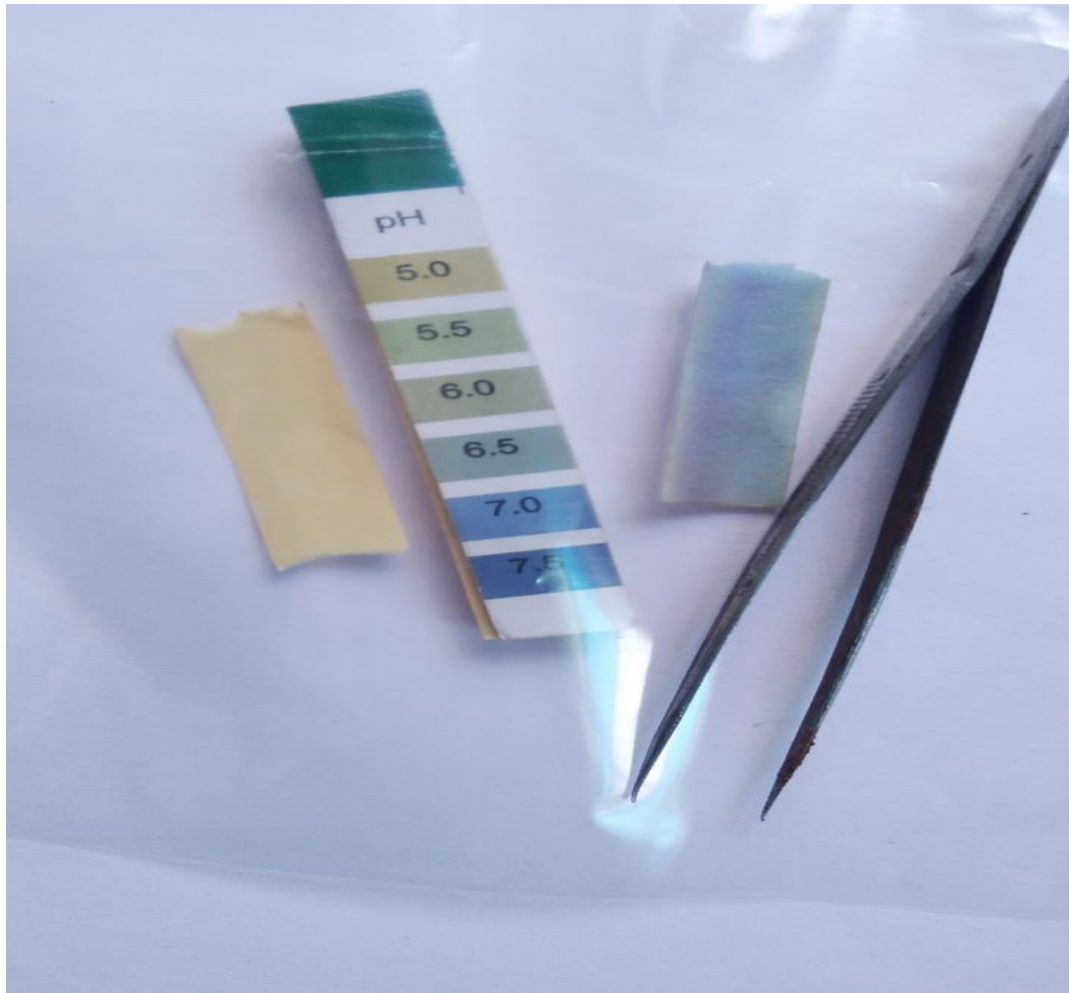


Fig.-3: URINE 'PH' TEST REPORT ON 24TH MARCH 7.5 (Day Before Starting of Navratri)

BY USING PH PAPER :- Colour tallied with Colour Chart in respect to Controlled Strip (Left Hand Side) and Tested Strip (Right Hand Side)

Vi.. During the Navratri programme period, total 10 days, he was totally abstained from ALOCOHOL CONSUMPTION, complete avoidance of animal protein rather followed complete vegetarian lifestyle.


v.Regular consumption of plenty of fruits in guise of PRASADAM (when it is fruit that is luxury to general people, it would be not permitted by their normal fund but case is reverse when it is prasad after offering to god/goddes)

vi. After completion 10 days programme he was completely fit from every aspect, his cough and other related problem was cured, appearance of his face was clear and bright. Sign of wellness in his appearance was very clear from his videography . on 4th April, 2020 – URINE TEST – PH : 6.5 [Acidic – reflection of safe level i.e. body is non-susceptible to pathogen] – REPORT ANNEXED : PH PAPER - (Fig.--4) / BIO-CHEMICAL TEST (Fig-5).



Fig.- 4: URINE 'PH' TEST REPORT ON 4TH APRIL 6.5 (After Completion of Navratri)

BY USING PH PAPER :- Colour tallied with Colour Chart in respect to Controlled Strip (Left Hand Side) and Tested Strip (Right Hand Side)



ANUBIKSHAN
Diagnostic Centre

Near Asansol District Hospital(Main Gate)
S.B. Goral Road, Asansol-713301
Email ID : anubikshan.dc@gmail.com
Ph : 0341-2221195, M : 9732362727, 7872772580

PATHOLOGY, FNAC, PAP, + USG-3D, + ECHO COLOUR DOPPLER, + ECG, + TMT

PATIENT ID: 2020D28941 NAME: JALADHAR GHOSH AGE: 55 YEAR MALE
ADVISED BY: Dr. .SELF,
DATE OF RECEIPT : 04/04/2020 DELIVERY DATE : 04/04/2020 TIME : 01:00 PM.

URINE ROUTINE EXAMINATION

PHYSICAL EXAMINATION

Colour	..
S.P.Gravity	..
Appearance	..
Sediment	..

CHEMICAL EXAMINATION

pH	6.5
Protein	..
Sugar	..
Blood	..


MICROSCOPICAL EXAMINATION

R.B.C	..
Pus Cells	..
Epethelial Cells	..
Casts	..
Crystals	..
Bacteria	..
Others	..

All Reference ranges are age and sex matched. Reference limit mentioned herein are in accordance with the literature provided along with the kit. Which may change in chemistry or the kit.

DR. APARNA MONDAL
M.B.B.S., MD(Pathology)
(Regd. No. 57881)

DR. SWARUP GHOSH
M.B.B.S., MD(Pathology)
(Regd. No. 52140)

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Fig. -5 : BIO-CHEMICAL URINE PH TEST REPORT – 6.5 ; Result at par with PH Testing Strip

2 ½ years child (Female) member : It was a notable character among the members of the family, because it is a matter of great interest that how a mere child receiving the Lock Down like punishable activity. Activities of that baby along with her 8 years old elder brother was video graphed vividly and analyzed their physical and psychological reactions during Navratri programme : i. Both the sister and brother were spontaneously engaged with all the allied activities of the PUJA(Worship). ii. Physically and psychologically both the children were highly charged with energy and recreational temperament. iii. They enjoyed and relish the Lock Down period as festive season.

4th notable member of the family, 32 yrs. aged young adult: i. Basically an highly extroverted personality, fond of non-vegetarian food and life style because of the programme he followed following routine: i. He avoided all type of animal protein during the full tenure of the programme . ii. Followed very restricted, nutritious and hygienic menu pattern, complete dependent on fruits and sweets. iii. Everyday at morning and evening time used to pass long time for observing the different rituals of the programme.

b. Case Study on COVID19 Attacked Hon'ble (*) Royal Couple [Foreign Country – Northern Hemisphere]: (*)for showing courtesy and maintaining international protocol

- The authors have achieved a rare of rarest golden opportunity to conduct a study on middle aged royal couple – The Hon'ble Madam got COVID19 attack and Positive test on 12th March 2020, but the Hon'ble Sir was not, he was quite normal and healthy.
- The authors communicated the positive result of their previous study on control of viral growth along with necessary suggestion on 12th March 2020 through mail.
- The Hon'ble Sir and Madam followed an innovative method of **quarantine system**, they shared the same roof in spite of staying isolated as other people followed as per WHO guideline.
- After completion of 14 days the Hon'ble Madam declared physically fit and COVID19 free by her physician (30th March, 2020).
- Hon'ble Sir continued more 14 days in quarantine condition to meet the medical protocol of that country, but he was quite normal at that period also.
- *On 8th April, 2020 Hon'ble Sir declared as normal and COVID19 free despite the sharing of same roof with a COVID19 attacked person.*
- On 10th April, 2020, the authors have received a mail of appreciation on behalf of the Hon'ble Sir *(**Hon'ble Prime Minister of a reputed country of Northern Hemisphere**).

Result and Discussion:

From QUANTITATIVE survey it is revealed that very promising results have been gathered in every cases as follows:

1. **Dengue Virus Case:** Application of Phyto-chemicals with plenty of fluid at the Ist Stage of Viral growth in the body is very much promising to relief the consequent fever and effectively reduce the Viral-Load and consequently complete relief of the ailment.
2. **Importance of Social cum Religious Ritual (NAVRATRI):** Maintaining of CLEAN CULTURE AND ENVIRONMENT through any rituals is very much essential to conserve them from medical science point of view
It is not only important for medico-physiology reason it is equally significant for psychological reasons also.
Not only adult persons, children are also getting benefit from this sustainable culture.
3. **Case of COVID19 Treatment and Prevention:** Treatment of COVID19 is not at all any factor to a normal person i.e. without any co-morbidity factor. It is automatically relieved after completion of life cycle of virus.

But the factor of prevention of COVID19 is the matter of MILLION DOLOR question.

Application of Phyto-chemicals(Herbal Products / BIOTHERAPEUTICS) with plenty of fluid is equally effective for preventing SARS CoV-2 Virus as the result observed in DENGUE-VIRUS case.

Conclusion:

Different qualitative survey strengthen the justification of quantitative studies, it is nothing new but it needs to be revisited its efficacy in the light of COVID19 -PANDEMIC like unpreidential situation .

It is fact that such type of fewer nos. of observation is not sufficient enough to justify the purpose, it need more and more clinical trial for universal acceptance and benefits.

It is a matter of hope that Ministry of **AYUSH** [AYURVED, YOGA/NATUROPATHY, UNANI, SIDDHA, HOMOEOPATHY], Govt. of India, most of the branches under AYUSH mainly deals with herbal product leading to the condition of application of **Phyto-chemical** in different form,

In last it is matter of proud that all work of the present study are at par with the modern and recent study on PHYTO-CHEMICALS = HERBAL PRODUCT= MEDICINAL PLANTS= AYURVEDA= **BIOTHERAPEUTICS** (used by Merck and Pfizer invented **FIRST EVER ORAL ANTIVIRAL PILL** for COVID 19 (all variant) treatment NAMED - **Mol Nup Ira Vir** and **Paxlovid** respectively.

Those would be the strong support in favour of application of antioxidant enriched **Phytochemicals (antiviral)** and social ritual (**Scientific and Spiritualistic**) to control the consequences of any FUTURE PANDEMIC both for **Therapeutics** and as **Prophylactic**.

DECLARATION: All the authors have strictly followed the advisory of WHO protocol applicable for LOCK DOWN period of a Pandemic.

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