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## **“COVID VIVID”**

**Dr. Ramesh Mahadev Tambat<sup>1</sup>, Dr. Anjali A B<sup>2</sup>, Dr. Nishath Fathima<sup>2</sup>, Dr. Yogendra Shrestha<sup>3</sup>**

<sup>1</sup>Professor & HOD, Dept. Of General Surgery, SIMS&RC, Bengaluru.

<sup>2</sup>Post Graduate Student, Dept. Of General Surgery, SIMS&RC, Bengaluru.

<sup>3</sup>Clinical Pharmacologist, Shree Maruti Hospital, Bengaluru.

### **ABSTRACT:**

Diversion of focus and the fear, perhaps has increased the mortality rate of other diseases due to more attention being paid to COVID-19 pandemic. Role of the Immune system in countering Novel Covid-19 viral infection as well as other disease is not to be undermined. Though scientific efforts to develop a vaccine continues, enhancing the functioning of the immune system remains an individual's best defense. Boosting the body's innate capacity at resisting infection can be achieved by modifying life styles intended to improve the three levels of the body's defense mechanisms. Skin the largest organ that covers the entire body acts as 1<sup>st</sup> barrier and the protection is physical in nature whereas innate immune mechanism and adaptive immune mechanisms correspondingly form the 2<sup>nd</sup> and 3<sup>rd</sup> layer that are humoral in origin. Methods aimed at improving immunity through changes in life style are discussed here.

### **KEYWORDS:**

Novel Covid-19, Immunity, Boosting, Mortality.

### **INTRODUCTION:**

SARS-CoV-2 virus infection has vivid manifestations, barring all Acute Lung Injury (ALI)/ Severe Acute Respiratory Infection(SARI)<sup>1</sup>. Of the nearly 73 mutants identified as on date only 6 strains have been identified to be involved in the pandemic spread of the disease in INDIA.<sup>2,3</sup>; Entry of the virus is mainly through breaking the epithelial layer in the nose, mouth, eyes and skin that constitute the 1<sup>st</sup> level of the body's defense mechanisms against invading organism.<sup>4,5,6,7</sup> Progress of the disease has been observed to follow a pattern in which three distinct phases can be identified: Phase 1 with cough, fever, wheezing, fatigue, headache, diarrhea, and dyspnea, reminiscent of an upper tract respiratory infection; Phase 2 with the rapid appearance of bilateral pneumonia, infiltrates, variable degrees of hypoxemia and vomiting; Phase3 involving respiratory failure that may even lead to death.<sup>8</sup>

Bronchial epithelial cells and pneumocytes are the targets cell of the SARS-CoV-2 virus in the early phase of the infection.<sup>9</sup> giving rise to the Phase 1 symptoms that includes the patient's initial mild symptoms at presentation. Possible progressive infiltration of the virus to the lower respiratory tract at a later stage of infection damages epithelial-endothelial barrier resulting in formation of micro thrombi that contribute to the high incidence of thrombotic complications including deep venous thrombosis, pulmonary embolism, thrombotic arterial complications (limb ischemia, ischemic stroke, myocardial infarction) that need emergency and critically care.<sup>9</sup>

Defense mechanism, although exists at the point of entry of the extraneous infective agent, needs or requires to be strengthened. We all are aware that immunity plays a great role in the body defense mechanisms. The immunity is a balanced state of multicellular

organisms having adequate biological defense to fight infection, disease or other unwanted biological invasion, while having adequate tolerance to avoid allergy and auto-immune diseases.<sup>10</sup> Since the diversion of focus and the fear of COVID-19 pandemic, the mortality rate of other diseases may be increasing due to lack of adequate treatment in the right time. As the scientific efforts to develop a vaccine, developing immunity remains an individual's best defense against the highly contagious COVID-19 virus. Immunity can be boosted by adopting simple ways in living, protecting ourselves from extraneous attacks at various levels i.e, layer I, II & III. Layer I – implies to skin, being the largest organ, forms a physical barrier. Layer II & III by innate & adaptive (acquired) defense mechanism within the body.

### Principle of practice of Basic Sciences and Alternative Medicine:

These are of great help in the times of crisis. Methods to increase or boost up local immunity at entry points include:

- 1. Skin:** “COVID FOOT” has been described nowadays and such lesions can be avoided by proper foot care, hygiene, and footbath. Exposure to sunlight for 15-20 minutes daily in the early morning and can boost Vitamin D3 synthesis in the skin.
- 2. Eyes:** Daily practice of eye wash with lukewarm saline using a small bucket. It can be done by immersing the eyes in the saline water (roughly a proportion of 5 tablespoons of salt in a full bucket of lukewarm water). Open both the eyes after immersing in the water and rotate the eyes in clockwise and anti-clockwise direction 8 times (3 minutes). We can also prepare our own ayurvedic eye drops, for which we have to take 2 leaves of tulasi, add it in 3 spoons of boiled and cooled water; mix it thoroughly and filter it. We can use this preparation for our eyes, 3-4 drops morning to evening but it should not be used during night.
- 3. Nose:** Practice of “JAL NETHI” using jal nethi pot for 5 minutes with lukewarm saline is one of the yogic techniques, our rich heritage. Alternatively, hot steam inhalation 4 times daily, using ginger powder, Vicks vapor, amrutanjan (1-2grams). We can also take one liter of water, add 1 piece of turmeric and 10 garlic's cloves and 30 leaves of tulasi, boil it and take the inhalation steam 3-4 times a day.
- 4. Throat:** Practice saline gargles 3-4 times in the morning and bedtime. Use of coconut oil can be implicated. Start by swishing it in mouth on empty stomach first thing in the morning. Take about 1 tablespoon of virgin coconut oil in the mouth and swish it for about 3-5 minutes; discard the oil by spitting it out. Do not swallow the oil as we will ingest the toxin with it as well. Rinse the mouth with warm water and brush your teeth as usual. Repeat the process 3-4 times. For throat irritation, take 5 black pepper kernels and rock salt. Take a single kernel of pepper, chew it in your mouth and swallow the secreted saliva slowly – once daily in the morning and night. Don't drink water for an hour after doing this. This will decrease the viral load in the throat.

### Steps to Improve Immunity in General “SUTRA OF 8”

- 1. Simple Diet:** Consume a balanced diet which has adequate amount of carbohydrates, protein and lipids to meet your daily caloric requirement in order to meet your body's demands. Consume a diet rich in micronutrients and macronutrients. Consume immunity boosting foods such as dry fruits, flax seeds, green leafy vegetables, fresh fruits. We can also add multivitamin supplements in our diet. Taking zinc supplements more than 50mg daily as it can play a pertinent role in mitigating covid-19. Vitamin C 1000mg daily or slicing a lemon in a glass of warm water and consuming it daily is thought to help reverse some of the damage that covid-19 can cause. Ayurvedic physicians recommend incorporating “KASHAYA” in our diet. For this we can take one liter of drinking water, boil it and add 9-10 leaves of tulasi. Drink it within 24 hours. We can also make kashaya using milk, for this we have to take 150ml of cow's milk and add 1/4<sup>th</sup>-1/2 spoon of turmeric powder, boil it thoroughly for 3 minutes, filter it and drink daily once or twice.

Take 200ml of drinking water, add some leaves of Amrutha Balli (Tinospora Cordifolia). It is a divine herb. Boil this and drink 50ml once daily. Restrain yourself from intoxicants such as- alcohol, tobacco, ghutka and paan.

2. **Body Hygiene:** Simple hygiene measures can protect us from getting infected by covid-19. Avoid touching your nose, eyes and mouth. Cover your mouth & nose with your elbow or tissue while coughing or sneezing. Dispose off the used tissue immediately. Remember the *mantra of "8"* & maintain a distance of *"8" feet* from people who are coughing or sneezing. Wash your hands frequently with soap and water for at least 20-30 seconds or use sanitizers to maintain hand hygiene.<sup>12</sup> We can prepare our own ayurvedic hand sanitizer by taking 3 spoons of coconut oil, 3-6 cloves of garlic & mix it thoroughly. You can use this sanitizer before heading out of your home. Apply this on your hands and a little quantity to both the nostrils. Avoid crowded areas as these crowds may be harboring the virus. Maintain cleanliness by not spitting in public places. Disinfect the high-touch surfaces at your home regularly to lower the risk of infection. Get adequate sleep of minimum 8 hours as this will help you boost your immunity. Use facemask in public areas and face shield in hospitals to avoid contacting the infection. Discard your mask within 72 hours of use and avoid using ill-fitting masks. *"Any mask is better than no mask"*
3. **Exercise:** Exercise enhances a good mood, weight loss, reduced stress, improved quality of life, increase in energy, boost in immune system and boost in productivity. Your body is your most priceless possession. Take care of it by incorporating exercise in your daily routine. *"8" shaped walk* helps in maintaining good health. Start walking from South to North direction in clockwise direction for 15 minutes and then anti-clockwise direction for 15 minutes. As you walk in South-North direction, i.e; towards and against the Earth's magnetic field, the body gets energized and activates chakras and all internal organs for normal functioning.<sup>11</sup>
4. **Prayers and Meditation:** Pray with positive assertions or affirmation in the mind. Prayers have a calming effect on your mind irrespective of your religion. The relaxing response from meditation helps to decrease in metabolism, lowers blood pressure, improve heart rate, breathing and brain waves. Hence incorporating prayers and meditation in your daily routine is surely going to help you, as well as heal you.
5. **Music:** Enjoy listening to light music. This will de-stress you, as well as enhance your mental and physical stimulation which will keep you active.
6. **Yoga:** It is a great technique used to do breathe control and adoption of specific bodily postures, widely practiced for health and relaxation. Adding pranayams or breathing techniques to our daily routine can make our lungs more efficient. Breathing exercise can help us manage respiratory ailments, improve immunity, lower stress and enhance the quality of life. Including kapalbhati in our morning routine will help us to improve our lung capacity. Simple stretching exercises (Shitalikaran Vyayam) will also be useful. "Om Kaar" breath holding for 30-40 seconds can be done. This works as a test for respiratory reserve and rule out any invasion by infectious agents.
7. **Living:** Spend time with your loved ones. Take time for your family, friends and pets. This can improve your health by coping with stress, enhances your mental health and increases your self-esteem and you'll have a better chances of living longer than those who don't. Live safe, have no fear.
8. **Ekanth Practice (Silence):** Spend time in a secluded place, alone or with nature – it helps to control one's subconscious mind. It also releases negative thoughts, gives peace of mind and enables connectivity from within.

"COVID-19" is highly contagious. Also, highly contagious is kindness, patience, love, enthusiasm and a positive attitude. DON'T wait to catch it from others, be the carrier!



Figure no.1 Jal Nethi

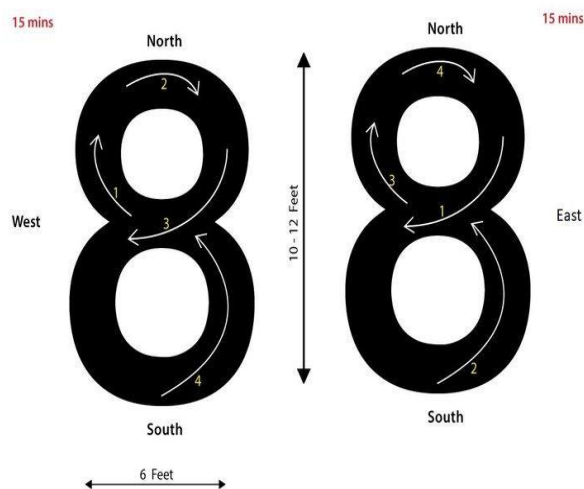


Figure no.2 "8" Shaped Walk

## REFERENCES:

1. Rothan H A, Byrareddy S N. the epidemiology and Pathogenesis of coronavirus disease (COVID-19). *Juat*. May 2020; 109,102433. <https://doi.org/10.1016/j.jaut.2020.102433>
2. Li et al., The Impact of Mutations in SARS-CoV-2 Spike on Viral Infectivity and Antigenicity, *Cell* (2020), <https://doi.org/10.1016/j.cell.2020.07.012>
3. Jamal A. Hope for covid-19 vaccine: novel Coronavirus strains show little variability. *Hindustan times*. August 04,2020.
4. L.T. Phan, T.V. Nguyen, Q.C. Luong, T.V. Nguyen, H.T. Nguyen, H.Q. Le, *et al.* Importation and human-to-human transmission of a novel coronavirus in Vietnam. *N Engl J Med* (2020).
5. Riou J, Althaus CL. Pattern of early human-to-human transmission of Wuhan 2019 novel coronavirus (2019-nCoV), December 2019 to January 2020. *Eurosurveillance*. 2020;25(4).
6. Parry J. China coronavirus: cases surge as official admits human to human transmission. *British Medical Journal Publishing Group*; 2020.
7. Q. Li, X. Guan, P. Wu, X. Wang, L. Zhou, Y. Tong, *et al.* Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. *N Engl J Med* (2020)
8. Domingo P *et al.* the four horsemen of a viral apocalypse: the pathogenesis of SARS-CoV-2 infection (COVID-19). *J.ebiom*. August 01 2020; 58, 102887. <https://doi.org/10.1016/j.ebiom.2020.102887>
9. Wiersinga W J, *et al.*, Pathophysiology, Transmission, Diagnosis and Treatment of coronavirus disease 2019(COVID-19). *JAMA*. Published online July 10, 2020. doi:10.1001/jama.2020.12839
10. Segerstrom SC *et al.* Worry affects the immune response to phobic fear. *Brain, behavior, and Immunity*. 1999; 13(2):80-92.
11. Sree RV. '8' shaped walk maintain good health. *IJPESH*. 2018;5(6):01-02
12. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>