"Role of Natural Immunity and Vaccine in Management of Contagious

Diseases".

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**Abstract** 

The mini review focuses on the current pandemic caused by the virus named SARS-CoV2. The

review highlights the data derived from the recognised websites and leading peer reviewed

articles from medical journals. The review specifically addresses the issues like, preexisiting

immunity to SARS-CoV2, mortality data for SARS-CoV2 and the robust natural immunity to

SARS-CoV2. It also dwells into the validity of the diagnostic test for SARS-CoV2 and the

efficacy of the vaccine developed against SARS-CoV2.

Introduction

The current paper is based on Summary of the Presentation done by me at ISAS Hyderabad

chapter webinar, entitled "Role of Natural Immunity and Vaccine in Management of Contagious

Diseases".

World Health Organisation (WHO) insists on scientific findings and not rumours to understand

the current health crisis caused by SARS CoV2. Our beloved PM also believes in discussion

(Tarka) to come to a conclusion. He beautifully quotes the debate between Mandana Mishra and

Adi Shankara, where there is no scope for retribution or anger. The following 6 scientific reasons

based on peer reviewed scientific papers is a sincere attempt to deliberate scientific data derived

from high impact publications, related to Influenza like Illness (ILI), caused by SARS CoV2.

**Results and Discussion** 

1. Definition of Pandemic is not met as per WHO: The old definition of Pandemic "An

influenza pandemic occurs when a new influenza virus appears against which the

human population has no immunity, resulting in several simultaneous epidemics

worldwide with enormous numbers of deaths and illness" has been changed to "An

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Ser. pp 28-34, 2022

28

influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity" during the 2009 Swine Flu pandemic.

The following papers prove the existence of robust pre-existing cellular and humoral immunity to SARS-CoV2 due to the immunological cross reactivity with other human corona viruses. The statement by WHO "No immunity to the current virus" is not appropriate.(References: Cell181:1489, 2020, Science370:1272/1339,2020 and BMJ 2020;370:.doi.org/10.1136/bmj.m3563, Nature 2020;584:457-62. Nat Rev Immunol 2020; 20:457-8.) When you cannot defend Pandemic whole thesis of Experimental medicine, Experimental vaccine, Experimental RT PCR Tests become questionable.

2. It is ILI and no increased mortality: (i)It is Influenza like Illness (ILI) as per WHO, health ministry, CDC USA and Lancet (Vol 395 May 16, 2020 <a href="https://doi.org/10.1016/S0140-6736">https://doi.org/10.1016/S0140-6736</a> (20)31052-7) and Para 4(b) of this letter. No increased mortality in India due to ILI which includes covid19, for the year 2020. Estimated Influenza associated respiratory and circulatory deaths in India was 1.5 lakh in 2010(population of 120 Crore) and same or less in 2020 (140 Crorepopulation) including the current flu, Covid19 (Journal Global health doi: 10.7189/jogh.10.010402). Insignificant death rate due to Covid 19 in India has been implicated due to the immune training of Indian population in the publication authored by the Director General of CSIR (medRxivdoi: <a href="https://doi.org/10.1101/2020.07.31.20165696">https://doi.org/10.1101/2020.07.31.20165696</a>).

(ii)CDC( DOI: <a href="https://doi.org/10.5888/pcd18.210123">https://doi.org/10.5888/pcd18.210123</a>), studied very large number (540,000) of Covid patients. Figure 1 and Table 1 of this document are the core contents of the presentation. Figure clearly tells that Co morbidity is the real reason for death. More than 99% Covid deaths had at least one comorbidity and less than 1% healthy people died of Covd. It means healthy people do not die of the disease more than ordinary Flu and why they need Vaccine. Further Vaccines are never tested on people with Comorbidity, children, lactating and pregnant ladies.

(iii) Omicron which has the dual traits of increased transmissibility and mild clinical symptoms offers to be a Christmas gift as a Mother Nature's Vaccine for the current Flu. Similar statement was made by the Dr Angelique, who is the Chair of South African medical Association, who identified Omicron. This Vaccine from Nature is efficient, safe, and very economical. All the medical establishments of the world concur that it is mild, but spreads rapidly. Virus spreading is a common feature, as we live in a viral planet. We have estimated 10^31 viruses in the planet whose weight is more than combined weight of whole plants and animals on the planet. Our body has > 350 trillion viruses and or DNA is composed of .8% viral DNA. The ability of Omicron to spread very fast is a bless in disguise and can be used to deliver this Vaccine from Nature very fast to the population at large.

(iv)Leading journal science (Science 370:1272/1339,2020) has mooted the idea of using mild corona viruses as Mother nature's Vaccine: Polyclonal IgG antibodies against 4 cold corona viruses (Co) targeted wider range of epitopes of SARS CoV2 Spike protein because of antigenic cross reactivity. Natural Vaccination: universal vaccine against current as well as future CoVs using Corona virus 229E which was identified 60 years back. The statement in the journal "Could pre-existing immunity to the common cold viruses be more protective than future vaccines? Without studying the question, we won't know," needs to be considered (BMJ 2020; 370:m3563).

There are 6 identified human Corona viruses which have epitopes cross reacting with current CoV2. Four seasonal Human Corona Viruses (HCoVs) cause cold symptoms in humans are: 229E, NL63, OC43, and HKU1. All these viruses are genetically much distinct than the SARS CoV2. SARS CoV1 (which caused the 2003 flu) has less than 80% genetic identity with SARS Cov2 but still mounts a robust T cell response against Cov2. The current variants of CoV2 (Delta, Omicron) have more than 99.5% similarity to the original Wuhan virus. (Nature 2020; 584:457-62). It means our Innate and adaptive immune system can take care of these jmutants very efficiently.

3. Virus Mapping for Causal Relationship with the disease as per Established Procedure not done: Dying with virus (as confirmed by cases using RTPCR test) and dying of

Virus are two different things. Virus Mapping for Causal Relationship with the disease as per Established Procedure not done to prove the cause of the current ILI, which is accepted by the authors of the original paper on the characterization of Wuhan virus (N Engl J Med 2020;382:727). Even Koch's postulates for the 21st century, as suggested by Fredrick and Elman Clinical Microbiol Reviews 9:18, 1996 are not met. It means we do not know which organism or agent is causing the current flu as per Medical Microbiology principles. Para 4(b) further supports this theory.

- 4. (a) RT PCR does not detect infective virus/ not specific and error prone: When you have not mapped the virus and not isolated the pure Virus from the original patients how can you design a test or Vaccine? The original RT PCR paper on SARS CoV2 (Euro Surveill.2020; https://doi.org/10.2807/1560-7917.ES.2020.25.3.2000045, Article submitted on 21 Jan 20 / accepted on 22 Jan 20 / published on 23 Jan 20) were written and conducted "without having virus material available,"RT PCR test does not detect infective virus/ not specific and error prone due to cross reactivity with other identified human corona viruses (see para 1 above). No correlation between viral load and disease severity as per ICMR. Contamination at various levels, transport and technical factors contribute to errors as per ICMR. This test is Not approved by FDA to test a virus, Not approved by manufacturer of the test to diagnose virus. The test cannot detect active Virus (The Nobel Laureate Dr Mullis). The statements in the RT PCR report like a) Results from RT PCR assay should be interpreted with other laboratory & clinical data. b) This test cannot rule out diseases caused by other bacterial & viral pathogens, clearly support the above statements and demonstrate beyond doubt the unreliability of RT PCR test.
  - (b) (CDC) has decided to discontinue RTPCR testing after 31 December 2021. Similarly, the letter dated July 21, 2021 (attached) was given to laboratories and other concerned in the country.

https://drive.google.com/file/d/12K5dS8An3t9RUGvxp9jWl32Qy9DCjh60/view?usp=drivesdk.CDC admitted that the RTPCR test did not distinguish between Covid and flu viruses. This means that in the last 52 years, flu patients have been diagnosed with Covid. As a result, millions of crores of Covid victims were registered. Based on this,

it was said that the disease spreads rapidly.Last week's news paper states the need for about 2 RTPCR tests before sequencing to establish infection with SARS CoV2. They use the technical words like S gene drop or S gene target failure. When people can't understand difficult words they think its right. In simple words because of mutation spike protein equivalent RNA sequence can't detected because of multiple mutation at the spike protein region. I am at a loss to describe the implications of this statement.

- 5. We have already achieved Population (herd) Immunity to Virus by Mother Nature's vaccination: We have already achieved Population (herd) Immunity to Virus. a) Via Natural Immunity to cross reacting other human corona viruses b) Robust long lasting Natural immunity to the current SARS CoV2 virus. T cells that are reactive to the N protein of SARS-CoV2, 17 years after the outbreak of SARS in 2003 (Long Lasting) Nature 2020;584:457-62. Please also refer to publications listed in Para 1.
- 6. Efficacy of Vaccine: Unlike pharmaceuticals, for which present illness drives demand, it is the "perception of risk" for disease that creates desire for vaccination. Health and economic Risk benefit analysis of the vaccination programme needs to be done based on the following scientific data.
  - (a) As per CDC definition of Vaccine most of the covid vaccines do not qualify to be vaccines. They can be called as Experimental Gene Therapy: Vaccine is a product that stimulates a person's immune system to produce immunity to a specific disease, protecting the person from that disease. This so-called COVID-19 "vaccine" does not provide the individuals who receive the vaccine with immunity to COVID-19, nor does it prevent the transmission of this disease. It does not meet the CDC's own definition of a vaccine. This COVID-19 experimental gene therapy is only designed to minimize your symptoms if you were to be infected with the COVID-19 virus.
  - (b) Will covid-19 vaccines save lives? Current trials aren't designed to tell us.

    None of the current vaccine trials are designed to detect the prevention serious sickness and hospitalization (BMJ

- 2020;371:m4037http://dx.doi.org/10.1136/bmj.m4037). Vaccination had no effect of new cases and Countries having more fully vaccinated people have more number of cases. CDC reports increased number of hospitalization in vaccinated people (Increases in COVID-19 are unrelated to levels of vaccination across 68countries and 2947 counties. European Journal of Epidemiologyhttps://doi.org/10.1007/s10654-021-00808-7.
- (c) Selection of volunteers for vaccination is not appropriate as complete spectrum of host immunity is not done. Volunteers are selected if they are RTPCR negative, seronegative but their T cell memory response not done, A decline in serum antibodies in convalescence covid patients may not reflect waning of immunity, but rather a contraction of the immune response with the development and persistence of T cell and B cell memory (Nature 2020; 584:457-62 T cells that are reactive to the N protein of SARS-CoV2 17 years after the outbreak of SARS in 2003 (Long Lasting). Rapid generation of durable B cell memory to SARS-CoV2 spike and nucleocapsid proteins in COVID-19 and convalescence. Science Immunology 2020:Vol. 5, Issue 54, eabf8891.Covishield uses Meningococcal vaccine as control which is not appropriate.
- (d) Results of First Trial on Covishield Vaccine efficacy (Lancet 2021; 397: 99–111) indicated that in the unvaccinated group percentage of healthy people are 98.41( 1.59% Sick People) and in Vaccinated group 99.39 people are healthy (0.61% Sick people), a mere \*\*1% increase\*\* of healthy people in Vaccinated group or 1% increased disease symptoms in Unvaccinated. This 1% increase in Unvaccinated refers to Cold, cough, Body ache, Fever, loss of appetite and NOT serious respiratory Disease or death. (BMJ 2020;371:m4037 http://dx.doi.org/10.1136/bmj.m4037). The above symptoms every body experience 2 to 3 times a year on an Average. By Math'sJugglery this 1% increase is made into an efficacy of \*\*61%\*\*. The absolute risk reduction of 1% is the real Answer and not the Relative Risk reduction of 61%. Do you think it is a great Vaccine which protects

us from ordinary symptoms 1% more than Unvaccinated? Calculation:  $(1.59 - 0.61) \div 1.59 \times 100 = 61\%$ .

#### Bio sketch of Dr Balakrishna Poduval



After M.Sc. in Biochemistry from University of Mysore, Selected for the BARC training School on a National basis and obtained his PhD related to BCG Immunotherapy from Mumbai University.

Dr Blakrishna Poduval was Former Professor, Homi Bhabha National Institute (HBNI), Former Head, Immunology & Hyperthermia Section, Bhabha Atomic Research Centre(BARC). PhD guide at HBNI and Mumbai University. He along with his team at BARC has contributed immensely to original knowledge in the area of Immunology and Critical care medicine related to Inflammation, Heatstroke Acute Radiation Syndrome and Septic Shock. His team also has original contribution in the area of Cancer and Radiation Biology.

45 peer reviewed high impact publications relating Cancer, Radiation Biology, Immunology, Stress biology.

Listing in International Medical Encyclopaedia article on Heat stroke (Hyperthermia).