



# THE PANDEMIC AND THE NEW NORMAL

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# Work-Life: Balance to Re-balance, the Changing Narrative



Colleges have begun their academic sessions in full swing and with it, also their extra-curricular activities. Mount Carmel College had its Investiture Ceremony earlier this month and the Humanities Association organized their first webinar on 12th August 2020. It was my privilege to be the speaker for this Inaugural Webinar and speak about a topic that I deeply care about. Colleges have adjusted to the 'new normal' and have brought about some sweeping changes. The teaching faculty and the administrative staff have had to shift to a new mode of working. The faculty are taking online classes, changing the modalities of their practical sessions and making the learning as experiential as possible. They continue to connect with and mentor their students, do their administrative duties and some of them also drive the activities for different associations and clubs. In the webinar, I spoke about the journey from Balance to Re-balance, and the interim chaos that we dealt with.

## **The BALANCE**

Pre-pandemic, we had somehow figured out the balance, we had the support systems and institutional help in place. We had a timetable, we managed home and work, child and elder care. Some days, we segmented and compartmentalised our home and work and some days, we let the thoughts from one permeate into the other. By reducing involvement and putting it beyond the line of immediate focus, we found the balance to some extent.

## **The CHAOS**

And then, the Pandemic happened and with it, a state of chaos, confusion and conflict. As the boundaries of home and work have merged seamlessly, the work pressures have multiplied. Women are bearing the larger burden of home chores and expected to manage it all- their work commitments and deadlines, a busy spouse working from home, a homebound child and monitoring their online activities and keeping them engaged and the unpaid labour. This gives them very little time for themselves. Recognise the early signs that the balance you had found is off- sleeplessness, constant worrying about what needs to be done, loss in appetite, feeling stressed, feeling angry and restless.

Women have now more than ever begun inquiring about another woman's state, how are they managing, what are they doing. This enquiry comes from a state of empathy, a state of saying, "I am with you on this and I understand how you feel. You are not alone." We all experienced immense anxiety. You felt we are not in control of the situation and sometimes, we want to run away, sometimes pretend like the chaos doesn't exist and sometimes fight it with all our might. Families vary and with it, how we deal with social roles and responsibilities. Social conditioning has a large role to play and along with it, the belief that we women have to manage everything. The narrative has to change, one bit at a time.

## THE RE-BALANCE

Changing the narrative is a two fold process. Taking inspiration from Stephen Covey's circle of influence and control- Firstly, learn and accept what is it that you can control, what can you influence and what are you concerned about. Control what you can and What you can't, let go. And while we are at it, remember these five learnings also.

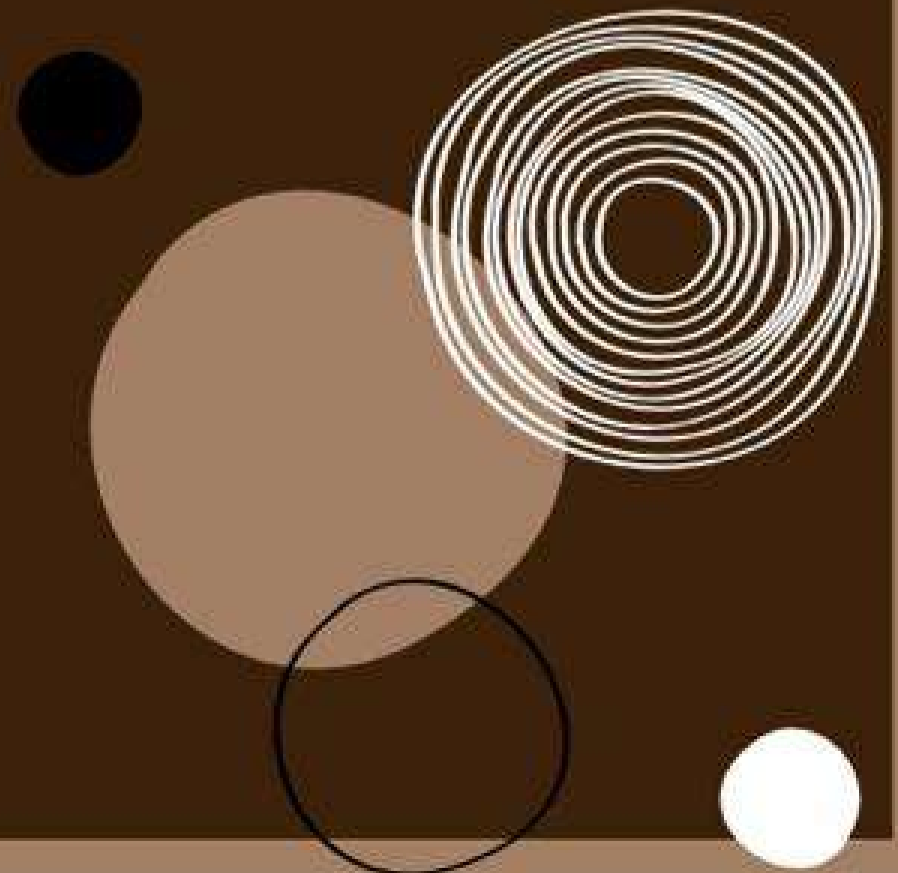
- **Seek and find Me-Time:** We often prioritise ourselves last. We need to bring 'us' up the list. Read or listen to music, cook or bake, garden, binge watch movies or series, knit or embroider, sing, dance, do your exercise, your Zumba or your yoga- do what helps you relax. Make this time for yourself and slot this time everyday, without an exception. If someone in the family doesn't understand why the me-time is important, have an open conversation, talk about its positive impact on your physical and mental health and how it helps you cope. Honestly, we don't need to explain why we need me-time.
- **Make that timetable and Set YOUR rules:** Make the timetable for the day, list the tasks that need to be done. Make a list for home chores and for your online courses and what needs to be done. Calendar your work meetings, your child's classes and submissions. Plan to the minutest detail. Use a notebook or an app, whatever works for you. And yes, divide your chores between family members and do not do what is theirs.
- **Learn to say No - Do NOT be a Martyr:** Important to prioritise yourself and in the process, also learn to say NO. Don't stretch yourself so thin that you collapse. Do not give up your me time, compromise with your work time or your nap time. Get everyone in the family to collaborate on your home chores and responsibilities. Be strict with the partner and your children, no exceptions.
- **Perfectionism is desirable, not at the cost of self:** we all do our best at work and home. Performance matrices need to be truly redefined and looked from a new lens this year. Make that to do list, but do not fret if you don't complete it in a day. Prioritize your work. Use the Eisenhower Matrix to make your life simpler- understand what is urgent and important and only you can do- do that. Understand what is urgent but not that important and doesn't require only you to do it. Eg. Booking that gas or ordering the groceries. Understand what is important but not urgent and see if you can move to the list later in the day or the week Finally, if something is neither urgent nor important, take it off that list.
- **Chill - the adrenaline rush can wait:** There has also been an interesting trend with the pandemic. We see people focusing on upskilling themselves, keeping themselves busier than usual, garnering new skills and hobbies. It is all good but it is also a personal journey.

Everyone doesn't have to do this. Do not get worried about that perfect cake someone is baking or that amazing art they did with their child. You are doing enough and you are doing the best you can. A social media representation has a behind the scene story always that you may not know. So chill, keep calm and move on. Easier said than done, but important for our own sanity. In the larger scheme of things, Focus on Self, now more than ever. Self-care, self-love, self-preservation and self-resilience is the mantra in this redefinition. Be mindful of the choices you make as you embark on this re-balancing journey. Work-Life Balance is not elusive, but a WIP for us, always.

**-Dr. Madhurima Das**  
**Lecturer Psychology Department**

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#FiveLearnings  
#WorkLifeBalance  
#WorkLifeRebalance  
#ChangingNarrative  
#FocusonSelf  
#OnlineWebinar  
#SpeakerReflections  
#selfLove  
#SelfCare  
#SelfPreservation  
#SelfResilience  
#MountCarmelCollege  
#MCCHumanitiesAssociation  
#EisenhowerMatrix #StephenCoveyCircleofInfluence



# Rediscovering the Discovered: Nutrition, Hygiene and Health



The novel Coronavirus", "COVID-19 Pandemic", "Self-Quarantine", "Lockdown"- These are some of the most commonly heard terms in our daily lives of 2020 and have become quite popular in the recent months. Seeing how the pandemic has taken a toll on our daily language, one can easily estimate and experience the impact it has on our lives. There are a thousand tips and suggestions proposed by health organizations, family, friends, and not to forget, "self-proclaimed" health professionals, to deal with COVID-19. We can also see that habits related to nutrition and lifestyle have been given considerable importance, in order to reduce the risk of contracting the Coronavirus. However, one thing to realize is that these proposed recommendations have already been developed and suggested many years back, before the Coronavirus came into the big picture. Let us have a deeper look at the above statement.

The FAO recommends eating a variety of foods from all food groups and consuming adequate amounts of fruits and vegetables, to maintain a healthy diet during the COVID-19 pandemic (FAO, 2020). These guidelines are no different from the concept of a balanced diet that we were supposed to follow every day, in the first place. According to the WHO, some of the general nutritional guidelines to be followed during self-quarantine are: i) limit your salt, sugar and fat intake ii) consume enough fibre and iii) stay hydrated (WHO, n.d.). It is very important to remain healthy during the pandemic by adopting nutritious eating practices, and these guidelines will fulfil the purpose to a certain extent. However, we must understand that such guidelines were already issued by health organizations in order to maintain a healthy diet, and are not solely specific to COVID-19.

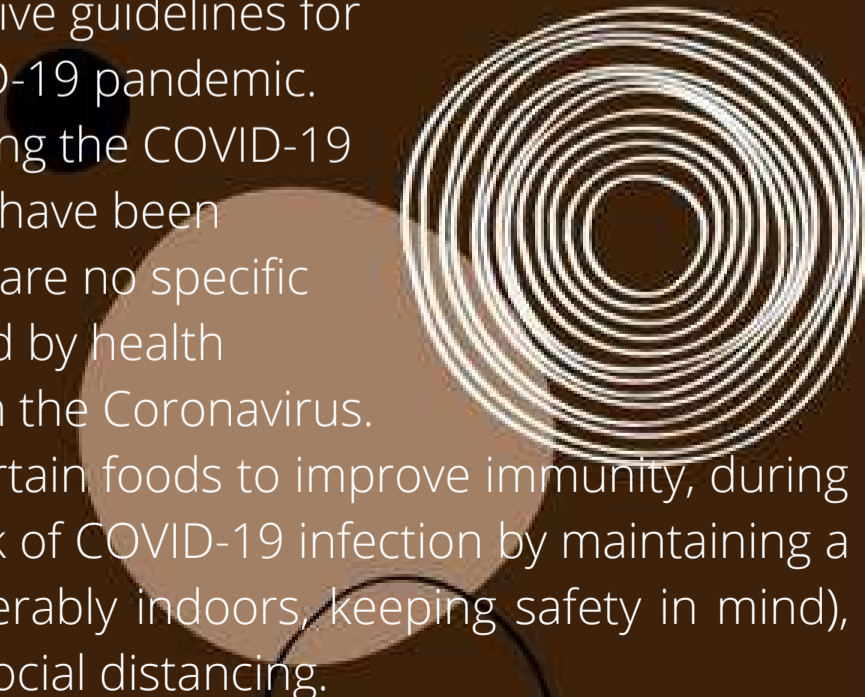
Foods such as ginger, garlic, tulsi, turmeric, amla etc. have been suggested by the FSSAI, as immunity boosters (FSSAI, 2020). These foods have also been listed as immunomodulatory herbs by Mahima et al. (2012). They have been known to show antioxidant property as well (Devasagayam et al., 2004). The food industry has opened several opportunities for the usage of these ingredients in food products, such as ice creams, nutraceuticals, herbal supplements etc. The consumer demand for such indigenous ingredients has increased considerably as well. These foods have been a part of India's traditional diet since decades, but were forgotten over the years. Health organizations have always stressed the need to include such functional foods in our daily diet, in order to achieve good health. Fortunately, they have returned into the limelight now, due to the COVID-19 pandemic and the increasing focus on immunity.

The breakfast is the most important meal of the day. Our parents have always tried their best to make us a healthy, nutritious breakfast and have advised us to never skip meals. Unfortunately in today's busy lifestyle, it has become quite tough to have proper meals and the practice of "not skipping breakfast" has nearly vanished. Fortunately, according to a survey done by Influence Central in the US, 39% of consumers reported that they have started eating a more filling or balanced breakfast in the pandemic, due to having more time in the morning (DeBroff, 2020). During the lockdown, all social networking platforms were flooded with pictures of food, posts regarding people trying out new recipes etc. The WHO also recommends preparation of home-cooked meals during self-quarantine (WHO, n.d.). Safe and tasty meals can be cooked right at home, with minimal processing and by following the guidelines for healthy eating. This recommendation is certainly not something new to us. Our ancestors and health professionals have always encouraged us to consume home-cooked meals rather than eating at restaurants. Unfortunately in today's world, we rely heavily on fast food chains, home-delivery and take-out options and find them satisfying and convenient. We have reached a point where home-cooked meals need to be "recommended" for consumption. On the bright side, it was seen that 62.3% of individuals declared that they were cooking more often, during the quarantine (Sidor and Rzymiski, 2020).

The lockdown also witnessed a huge number of people engaging in physical activity. Social media sites were filled with workout and yoga videos. It was stated that 58% of low-active adults were seen exercising more, during the lockdown (Constandt et al., 2020). Exercising regularly has also been recommended by the FAO, to cope with the COVID-19 pandemic (FAO, 2020). Physical activity improves immunity and therefore, is of utmost importance during this time. However, we must all note that physical activity has always been recommended by health professionals to improve our health status, much before the COVID-19 outbreak.

Washing of hands has become very important in this pandemic. It has been stated that washing hands is one of the most effective ways to prevent the spread of respiratory and diarrheal infections (Centers for Disease Control and Prevention, 2020). We can see how the WHO steps of hand wash have been effectively promoted on social media and digital media through posters, advertisements etc. Lin et al. (2020) stated that the Google search for "wash hands" increased among 21 countries, in the COVID-19 outbreak (from 19th January 2020-18th February 2020), which indicated the promotion of hand hygiene awareness. Funnily enough, these concepts of hand hygiene were taught to us much earlier, but we hardly put them into practice. Fortunately, we have started practicing them now owing to the need of the hour.

The main goal of highlighting the above points is to emphasize that health organizations have always recommended effective guidelines for the sake of our health, irrespective of the COVID-19 pandemic. The guidelines for maintaining good health during the COVID-19 outbreak are not very different from those that have been recommended for our daily normal lives. There are no specific nutritional guidelines that can be recommended by health organizations, to fully guarantee our safety from the Coronavirus. However, increased focus has been given to certain foods to improve immunity, during this pandemic. We can definitely reduce the risk of COVID-19 infection by maintaining a healthy diet, engaging in physical activity (preferably indoors, keeping safety in mind), washing hands, wearing masks and practicing social distancing.



It has also been made clear by health organizations such as the FSSAI, WHO, FAO etc. that a healthy diet and lifestyle is important to prevent any infection and not COVID-19, specifically. The general guidelines for management of good health have always been the same but unfortunately, we have not given them much importance and/or have not been following them consciously. We have started rediscovering the facts that have already been discovered, and are now paying attention to them. There is a possibility that we would have had improved health status now, if we had taken these guidelines into consideration long back. We would have probably had better immunity now and the current incidence of diseases would have probably been at a lower rate too. Nevertheless, let us live by the motto, "Better late than never" and start taking our health seriously. We need to follow a healthy diet and lifestyle each and every day of our lives, and not only during a pandemic. The positive modifications that we have currently incorporated in our life must be followed even after the pandemic subsides. We must certainly not wait for another pandemic to occur in order to make healthy dietary and lifestyle modifications. Having good health is a long-term, step-wise process and not a short-term goal that can be achieved overnight. Therefore, eat right, exercise and practice good hygiene today in order to achieve a healthy tomorrow!

**- Krithika Raj**

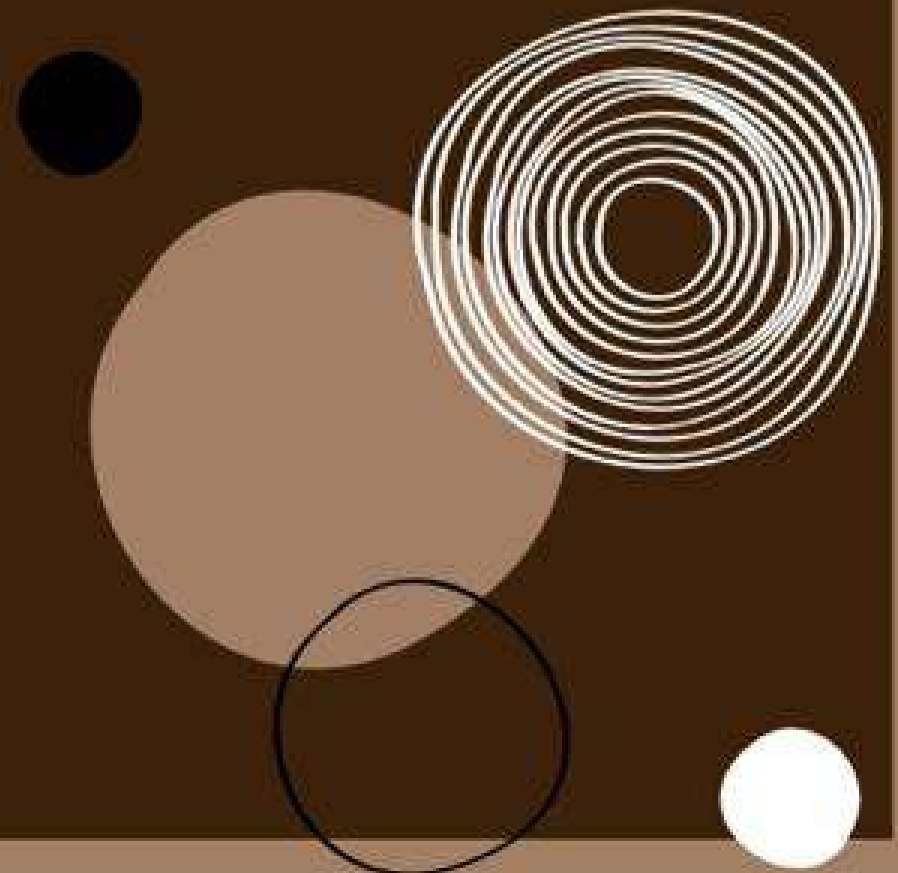
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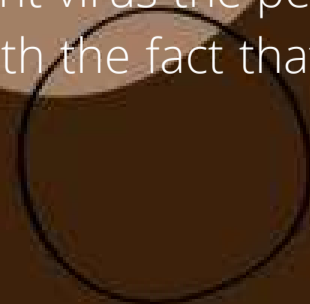


# Is Covid- 19 going to be the final Pandemic?



The emergence of Covid-19 has introduced us to the possibilities of exposing oneself to numerous deadly pathogens. This has given us a new lifestyle to adapt by following high hygienic practices. What it would be when there is an outbreak of a disease that seemed to happen millions of years in the past? There are chances of emergence of Permafrost pandemic. The rise in global warming has increased the land temperature this has a great impact on the various factors one among which is melting of glaciers. There are evidences to prove that melting of permafrost has paved path to an anthrax outbreak in 2016 from a carcass of long-dead reindeer and other animals. The outbreak of long dormant anthrax infected 72 people and killed a 12-year old boy (Resnick, 2019). The place of outbreak was in Yamal Peninsula that lies high above the Arctic Circle. The land is covered with more than thousands of feet of frozen solid particles. The frozen matter is so huge that the soil in Yamal Peninsula acts as a giant freezer. Anthrax is a disease caused by spores of soil micro-organisms called as *Bacillus anthrax*. The outbreak of disease was due to the surfacing of a reindeer carcass that died 75 years ago. The rise in temperature on Earth's atmosphere melted the permafrost and surfaced the reindeer's carcass along with the anthrax spores. The spored spread across tundra which was grazed by reindeers; this further infected the human beings in the region (Douceff, 2016). The melting of glaciers not only leads to rise in sea level, but also it destructs the habitat of polar animals and released deadly pathogens into their life. The pathogen containing water from glacier will flow into ocean; this can cause infection in the aquatic animals as well World Wildlife Fund, 2020).

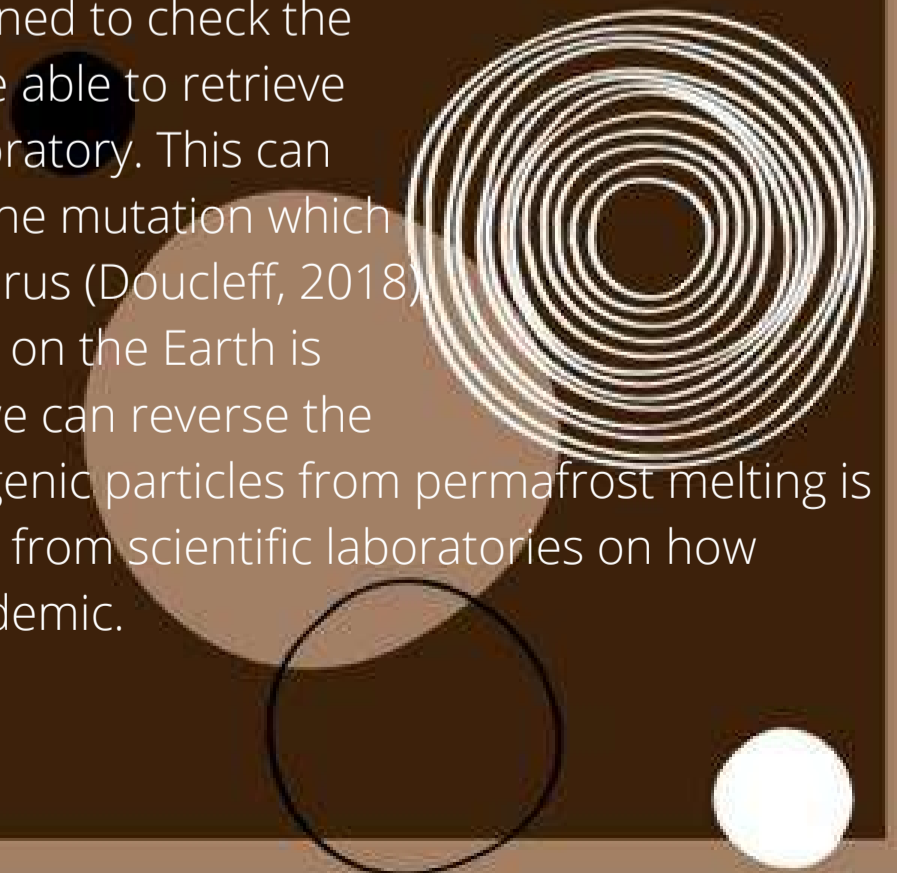
This is just an example of how the permafrost melting can cause deadly outbreaks in human community. Another evidence of retrieving ancient virus from the permafrost was Pithovirus sibericum, a class of giant virus. The uniqueness of the virus is its size that can be visualized under a simple microscope having 1.5micrometers in length. An estimate that it could have induced infection dates back by 30,000 years. It is an ancient pathogen that was discovered from 30 meter down in the frozen ground. Similarly, one can retrieve ancient virus the permafrost using efficient laboratory skills. However, a sigh of relief comes with the fact that it infects only amoebas (Morelle, 2014).



Permafrost is defined as the area of ground that remains at or below zero degrees Celsius throughout the year for at least two consecutive years. It is the region of earth where it contains ice in various forms, from ice held within the soil spread to the massive bodies of pure ice many meters thick. The large quantities of frozen matter present in the Permafrost are vulnerable to thaw and have high practical significance. The melting of Permafrost is an indicative of the present and past climatic phenomenon. This area of land is vulnerable to the climatic conditions, i.e., the green-house gas build up, global warming, pollution, gaseous exchange, and several other factors. The melted ice is released into aquatic bodies water, the organisms surviving in the aquatic body has a direct impact by the exposed pathogens, the same water resources are consumed by human beings for their daily activities as well. In this way one can get infected by the potential pathogens released into the aquatic bodies which can lead to mild or severe infections (International Panel on Climate Change, 2020).

There was an outbreak of Novel Cetacean Morbillivirus (CeMV) in 2016 in the animals belonging to the order of Cetacea. It is a negative sense RNA virus classified in the genus Morbillivirus belonging to the family of Paramyxoviridae. The outbreak was observed in striped dolphins stranded on the Spanish- Mediterranean coastline (Mira et al., 2019). The first infection of Cetacean Morbillivirus was detected in the year 1988 in Northern Ireland's Harbor porpoise. The evolutionary study of the virus states that the evolutionary rate is  $2.34 \times 10^{-4}$  nucleotide substitutions/site/year and showed that CeMV evolutionary dynamics are neither location- restricted nor host- restricted. Due to the cellular receptors' CD 150 present in seals, whales and dolphins, the virus can readily spread among multiple cetacean populations. Though the genetic variation within individual CeMV lineages appears to be low with a pairwise identity distance of 98.3- 99.99% (Jo et al., 2018). Though this does not have a direct relation to permafrost melting, the resistance of virus is increasing day-by- day due to the changing atmospheric factors. The survival of aquatic organisms is an important as any terrestrial organism because of their influence on atmosphere. Some of the species of whales are listed as endangered species. Whales can sequester an average of 33 tons of Carbon dioxide and significantly decrease the green-house gas in the atmosphere. Likewise, other organisms do contain some mechanisms that help in maintaining a balance between atmosphere and living bodies (Chami et al., 2019).

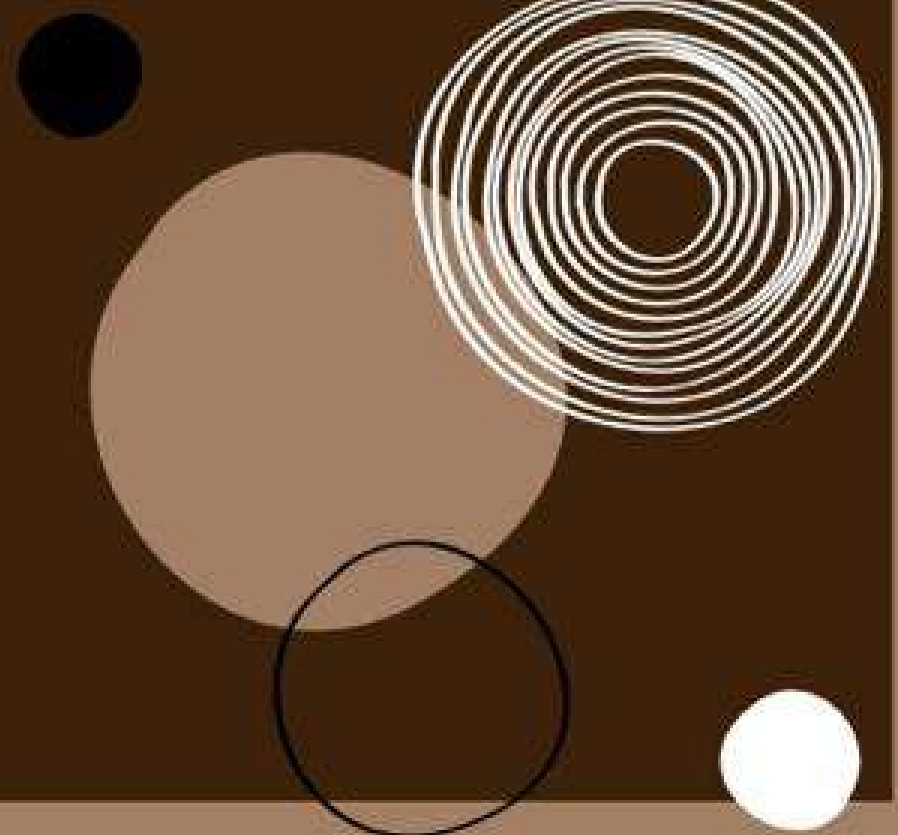
A Paleo-pathologist in Pennsylvania studied dead remains from permafrost of people who died due to pneumonia. The team faced failure in retrieving the bacteria from lungs since it was killed due to the extreme cold environment. The extent of preservation of living bodies in permafrost is so good that a 6-year old girl died of starvation in the past (800 years ago) was surfaced by erosion as a block of ice. Similarly, dead bodies of people died due to smallpox and 1918 pandemic who were buried under Alaskan region and Norway were taken and samples were obtained to check the ability of microbe retrieval. The researchers were able to retrieve the virus but could not grow the virus in the laboratory. This can be due to the reason that the virus has undergone mutation which makes them different from that of the original virus (Douceff, 2018). The effect of global warming and climate change on the Earth is unavoidable, but there are measures by which we can reverse the changes. The threat of revival of viral and pathogenic particles from permafrost melting is also a major concern, but the threat arises more from scientific laboratories on how they control or prevent the occurrence of a pandemic.



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# Potential Of Essential Oils In Providing Protection Against The Novel Coronavirus



The Novel Coronavirus has undoubtedly brought a phase of a new normal. We all have been trying to find more unique ways to do things that were never thought of before. For instance, working and studying from home. Thanks to the technology, while we confine ourselves indoors, the flow of information hasn't really stopped. May it be the television or the internet, people have been curious about newer methods of boosting their immunity in terms of protecting themselves against the infection. Every conversation regarding alternative medicine is incomplete, without a discussion of essential oils. Several sources have mentioned that some essential oils have the potential to protect an individual against this viral infection. But until when?

## What are essential oils?

Essential oils are widely used in aromatherapy as an alternative form of medicine. An essential oil (EO) is a concentrated liquid which is extracted from plants. They are hydrophobic and volatile, which means that they do not dissolve in water and evaporate quickly at normal temperatures. Even though there are a plethora of essential oils available, not all plants produce these. Only plants with specific medicinal properties help us in deriving essential oils. Interestingly, essential oils are also utilised by plants themselves. Some of these naturally occurring essential oils help a plant in primary physiological functions such as hormonal effects, healing, protection against infections, humidity control and attracting specific organisms. Another critical fact to know about essential oils is that they are composed of an active chemical which is responsible for all its medicinal effects. For instance, the active chemical inside eucalyptus essential oil is 1,8-Cineol or Eucalyptol.

## How do essential oils protect against infections?

As mentioned above, the most crucial property of these essential oils is volatility. Since an essential oil is volatile, its vapours can reach the upper and the lower parts of the respiratory tract to perform a specific mechanism of action against a pathogen. In case of a microbial pathogen, essential oils are known to complete a process known as cell lysis. This process attacks the pathogen while providing relief to an individual.

Essential oils have been checked for their anti-microbial activities in many clinical trials. In one of these trials, a chemically characterised essential oil blend resulted in the inactivation and a reduction in the capacity of multiplication of H9N2 Avian Influenza Virus (Kumosani et al, 2017). In another trial, a herbal product containing eucalyptus essential oil and menthol along with other components exhibited anti-viral activity against the virus that causes Newcastle Disease (Bragg, 2006). In yet another trial, a blend of tea tree EO and eucalyptus EO was able to inactivate the Influenza A virus and an E. coli phage M13 within 5-15 minutes of exposure (Usachev et al, 2013). As such, we can conclude that essential oils have proven themselves in several trials when it comes to anti-microbial properties.

### **Can essential oils provide any protection in case of COVID-19?**

To answer this question, let us first brush up a few facts about the novel coronavirus. The virus responsible for causing COVID-19 is known as SARS-CoV-2. It belongs to the same family of viruses which caused SARS back in the day. This respiratory virus gets transmitted from one person to another in the form of small droplets of moisture. These droplets are generated when a person coughs, sneezes or even talks without a mask. There are three routes by which the virus enters the body of an individual. These three routes include eyes, mouth and nose. Since 90% of the inhaled air travels through the nasal pathway, we can conclude that the primary site of entry for the novel coronavirus is also the nose. Another vital thing to know about the novel coronavirus is that it has a significantly more extended incubation period. The incubation period of the virus is the time between the exposure and the display of symptoms. According to experts, the incubation period for the novel coronavirus ranges from 2 to 15 days (Backer et al, 2020). During this period, the viral genomes replicate while the host responds by producing cytokines in the body. Moreover, the novel coronavirus also loses its viability at a higher temperature. Additionally, one should know that viral load is a measure of the viral particles in an individual. According to a study published in the journal The Lancet (Pujadas et al, 2020), a team of researchers at the Icahn School Of Medicine at Mount Sinai in New York found that a high viral load in the respiratory tract was connected to the mortality or the risk of death among the hospitalised patients with COVID-19. Now let us connect our facts with our findings. In a research published in the Journal of Pharmacology & Clinical Toxicology (Brochot et al, 2017), the chemically active ingredients of essential oils such as eucalyptol and menthol exhibited virucidal properties. These essential oils were able to attack the envelope protein of the coronavirus by disrupting the viral membrane and interfering with the viral envelope proteins in the early incubation period. Moreover, essential oils are usually inhaled in the form of vapours along with steam. The water vapour heated at such a high temperature reaches the upper respiratory system and helps in moistening the passages. Since high temperature is also associated with the loss of viability of the novel coronavirus, a combination of both essential oils and steam may further reduce the viral load of the viral particles thereby reducing the severity of the disease.

### **Are these findings spot on?**

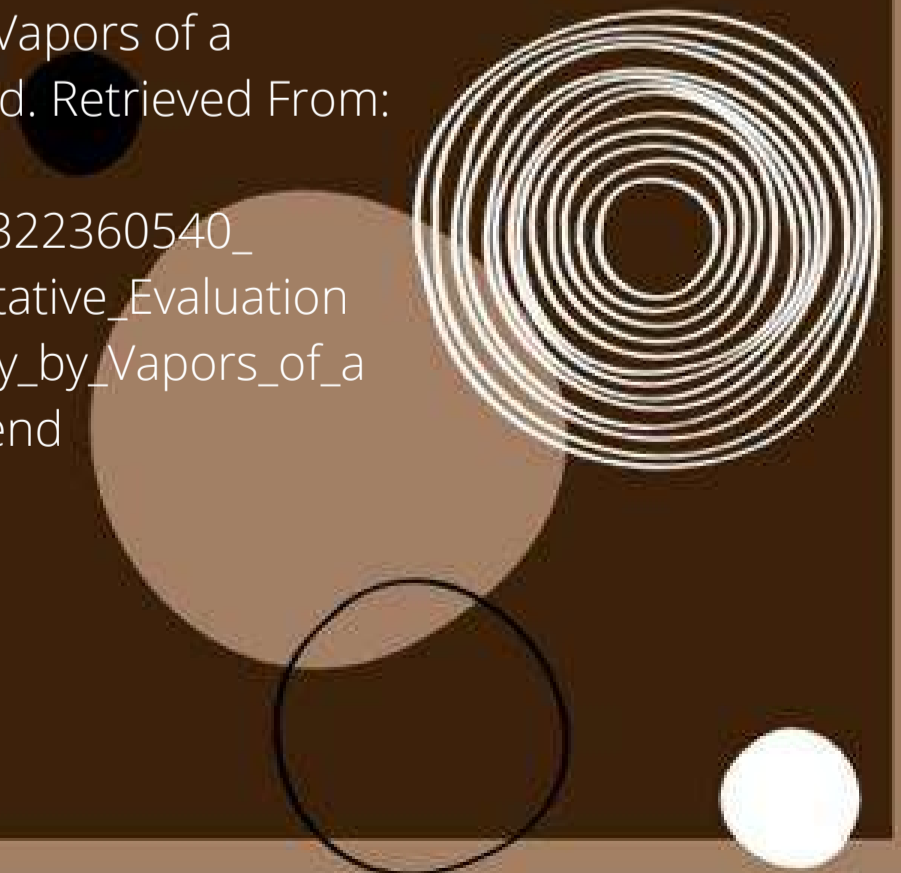
A majority of these clinical trials have been conducted on a small number of infected hospitalised patients. Therefore, scientists have not been able to come upon a specific conclusion when it comes to inhaling the essential oils. However, based on the findings of these studies, we can certainly confirm the anti-microbial properties of the chemically active molecules of these essential oils. As such, inhaling them carefully wouldn't be harmful even if it doesn't prove to be fruitful. More research in this sphere may open newer prospects and methods

of dealing with diseases. When it comes to science, errors, evidence and change in methodologies happen continually. The DNA wasn't discovered in the first attempt. It required several tests and a span of rigorous research to confirm the identity of the genetic material. This pandemic has, however, made all the procedures unfold in the eye of the public that is not necessarily acquainted with scientific methods. This is precisely the reason why we need to be patient and practice all the fool-proof safety guidelines while ignoring the dirt that is being thrown upon researchers and healthcare providers. Boosting your immunity while practising social distancing remains to be the best protective measure until a vaccine is developed!

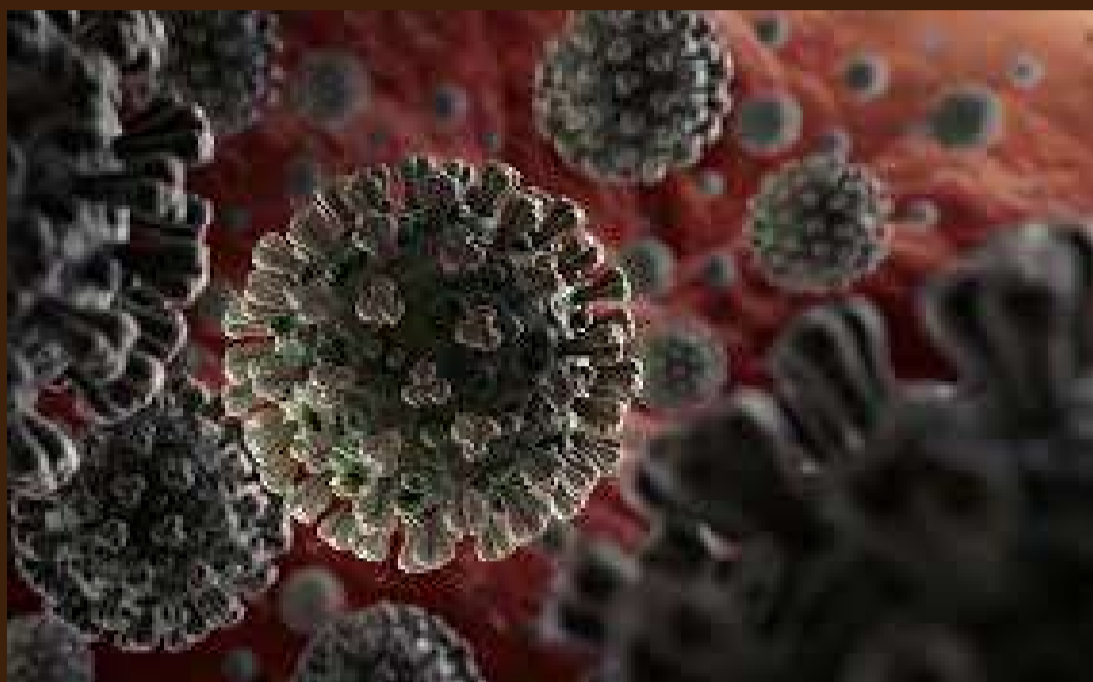
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# CORONAVIRUS: THE VIRAL HOLOCAUST HEAVY ON MEN



The world is in the midst of coronavirus disease 2019 (Covid -19) pandemic which is caused by SARS-Cov-2 (severe acute respiratory syndrome coronavirus 2).It is an outbreak which was first reported in the city of Wuhan in December 2019. It is the third highly pathogenic and transmissible coronavirus after SARS-CoV (Severe acute respiratory syndrome coronavirus) and MERS-CoV (Middle East respiratory Syndrome coronavirus). The disease spreads between people most often when they are close, physically. It spreads very quickly and sustainably through air, via small droplets when the infected person coughs, sneezes or talks. Amid of Covid-19, emphasis was given initially on the elderly or those who have preexisting health conditions like obesity, hypertension and diabetes as being at a high risk of contracting and/or dying of Covid-19. But the epidemiological findings show higher mortality in males than that in females. Thus, it seems that being a male is also a factor as being at a high risk of Covid-19 susceptibility. In May, 2020, data show that 64% of the patients were male in India. Among the states which have reported gender data, the difference in the number of males and females affected is quite prominent, in fact the number of males affected is double the number of females affected.

STATE	MALES (%)	FEMALES (%)
Maharashtra	62	38
Tamil Nadu	68	32
Telangana	66	33
Karnataka	64	36
Bihar	58	42

(Source: THE HINDU)

The reason behind this fact of gender gap has four broad factors and reasons namely genetics, endocrinology, immunology and behavioral factors. All these factors are the reasons why this pandemic seems to be a male genocide.

## **GENETICS:**

The Angiotensin-converting enzyme-2 (ACE 2) encoded by ACE 2 gene has been proved to be the receptor for both the SARS-coronavirus and the human respiratory coronavirus NL632020. An in vitro study demonstrated the positive correlation of ACE2 expression and the infection of SARS-CoV. This means that an organism whose expression of ACE 2 protein is high has a facilitated environment for pathogenesis of coronavirus. Now, for example, in studying the expression level of human ACE 2 using a single-cell RNA-sequencing (RNA-seq), analysis indicated that males had higher expression of ACE 2 than female. "Dysfunctions" induced by Roux-en-Y gastric bypass surgery are concomitant with metabolic improvement independent of weight loss (Cao et al, 2020)

## **ENDOCRINOLOGY**

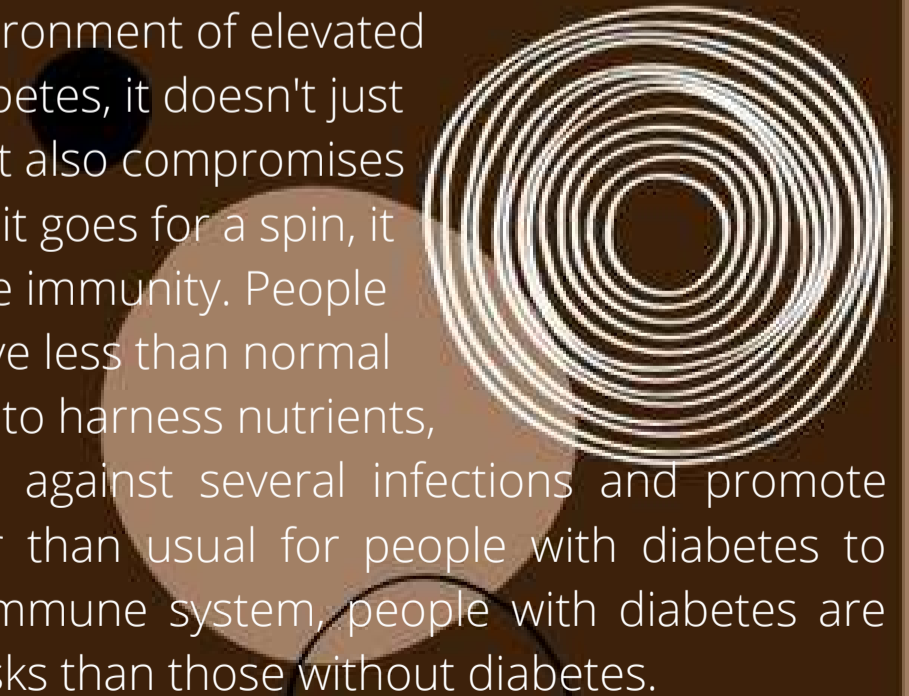
It is seen that Estrogen in females interacts with the renin-angiotensin-aldosterone system which plays an important role in COVID-19 infectivity, and also modulates the vasomotor homeostasis. Testosterone on the other hand enhances the levels of the angiotensin-converting enzyme 2 (ACE2) and the transmembrane protease serine-type 2 (TMPRSS2), transcriptionally and post-translationally. This actually increases the viral susceptibility and also decreases the viral eradication in males than that of females, thus leading to men getting affected more than females. In animal experiments, it is seen that treatment with estrogen silences the inflammatory reactions and also decreases virus titers. This leads to an improved survival rate in females. It really seems to be an ideal prevention and therapy against the pandemic of COVID-19 (Zsuzsanna et al., 2020).

## **IMMUNOLOGY**

The Immunological checkpoints, such as the inhibitory CD200 receptor (CD200R), greatly play a great role in balancing the immune system during microbial infection. This is done by stimulating hyperimmune mediated responses. CD200-CD200R and sex are host factors that together determine the outcome of the viral infection. In the study conducted in mice, lack of CD200R signalling strongly enhanced type I interferon (IFN) production and viral clearance and improved the outcome of mouse hepatitis coronavirus infection, particularly in female mice. This means that organisms with high CD200R signalling have an enhanced clearance of viral infection (Karnam et al., 2012)

## **BEHAVIORIAL**

Lifestyle also seems to be very important factor. It was seen in a study that women had more responsible attitude towards cleanliness and hygiene than males. Also, higher amount of alcohol consumption and smoking is seen in males than in females. Drinking causes Diabetes. When people with diabetes develop a viral infection, it can be harder to treat due to fluctuations in blood glucose levels and, possibly, the presence of diabetes complications. There appear to be two reasons for this. Firstly, the immune system is compromised, making it harder to fight the virus and likely leading to a longer recovery period. Secondly, the virus may thrive in an environment of elevated blood glucose. When a person suffers from diabetes, it doesn't just simply affect the body's blood glucose levels but also compromises the insulin production levels in the body. When it goes for a spin, it can have lasting complications, especially on the immunity. People with high or unmanaged blood sugar levels have less than normal blood flow, which makes it difficult for the body to harness nutrients, natural defenses meant to protect the body against several infections and promote healing. Hence, it usually takes a little longer than usual for people with diabetes to recover as well. Because of their weakened immune system, people with diabetes are more likely to develop infections and chronic risks than those without diabetes.





## CONCLUSION

The biological differences between men and women lead to differences in contracting the virus and also fighting the infection. These differences not only include the genetic difference of higher expression of ACE2 receptors in men, but also the sex hormones, immunological and in lifestyle of men. Also higher alcohol consumption and smoking in men than females leads to chronic diseases like diabetes and that can effectively lead to an environment that helps the virus to live and hampering the insulin production. Also this leads to ineffectiveness of the body to harness nutrients leading to a weakened immune system. This leads to an increase in the recovery time from viral infection and also can lead to greater death rates in males. Also females have an attitude to maintain cleanliness and use sanitizers and soaps frequently, leading to their better hygiene and thus less contact with the virus. As a result, are less susceptible to the virus.

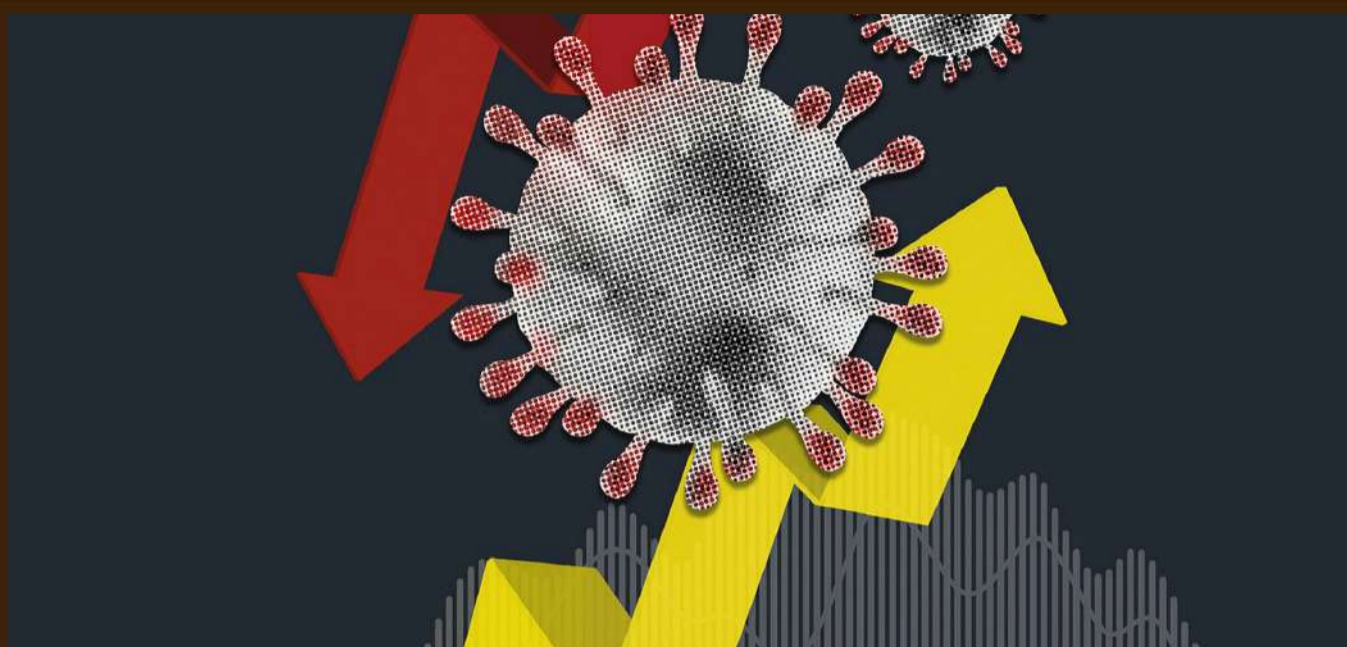
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# THE PARADOX OF PAUSE



Everyday you open a newspaper you see flood of articles on how numbers of covid tally is increasing, how we are moving towards a global recession, how people are becoming jobless and how poverty is shooting. But is this gloom the only reality? Have it only negatively impacted the Indian Economy? May be we need to look at the wider picture to see the undercurrents of silver lining in the overshadowing gloomy days. Maybe the PAUSE isn't a pause after all. No doubt that COVID 19 is a defining event and people have often commented the notions of "BC an AD era" should be changed to "BC and AC era", given the wide impact the virus had on various dimension of living. This is a major health crisis that we are facing after the Spanish flu and economist predict that it would be as impactful as the great depression. But this new change along with economic challenges have brought forth some new economic opportunities that we as an economy should seize. While most economies project negative trend in growth rate, only two developing economy ie. India and China shall continue to thread in positive territories. Indian economy is expected to expand by 2 % in 2020 as well. According to NITI Ayog output is expected to increase by 3%. Indian industries aren't exposed to vulnerable sector hence have ease in bouncing back from crisis. COVID will definitely give a blow, but the structure of Indian economy makes it easier to bounce back.

With the introduction of LPG policy, manufacturing was sucked out from India. COVID provides an opportunity again to build up manufacturing, to focus on nation state for home production. Definitely for India to continue as a domestic producer, should use contemporary technology because we can't overrule the impact of competitiveness in global regime. There is an opportunity of growth of E Commerce Industry as the Lockdown has exponentially increased the utility of Online orders. The E-commerce business has picked up and companies like Amazon and Flipkart has seen a growth in sales, this will ultimately translate into good component of GST Collection by Central Government. The Pandemic has changed our way of life as a result of which demand of certain services have gone up as OTT platforms or doorstep delivery. The demand of Hydroxychloroquine from across the world had provided the Indian Pharma Industry a place in global Scene. It has also led to breakthrough collaboration and research. Despite of being heavily criticized, the Health sector is doing more than thought for in the situation.

This has been supported by administration. Post Covid we may see a reasonable allocation of revenue to the health sector. 20% of the GDP depends on agriculture and it isn't affected by the situation as NITI Ayog predicts a 3% rise in agricultural output. One positive impact of the loss of job is that people are enhancing their skills and marketable education level. Hence post Covid we can expect a good quality of workforce in the market. The stock market indices has slumped over last quarter, so as the normal activities resume the slumped market are likely to move upwards, hence giving smart investors to mint money.

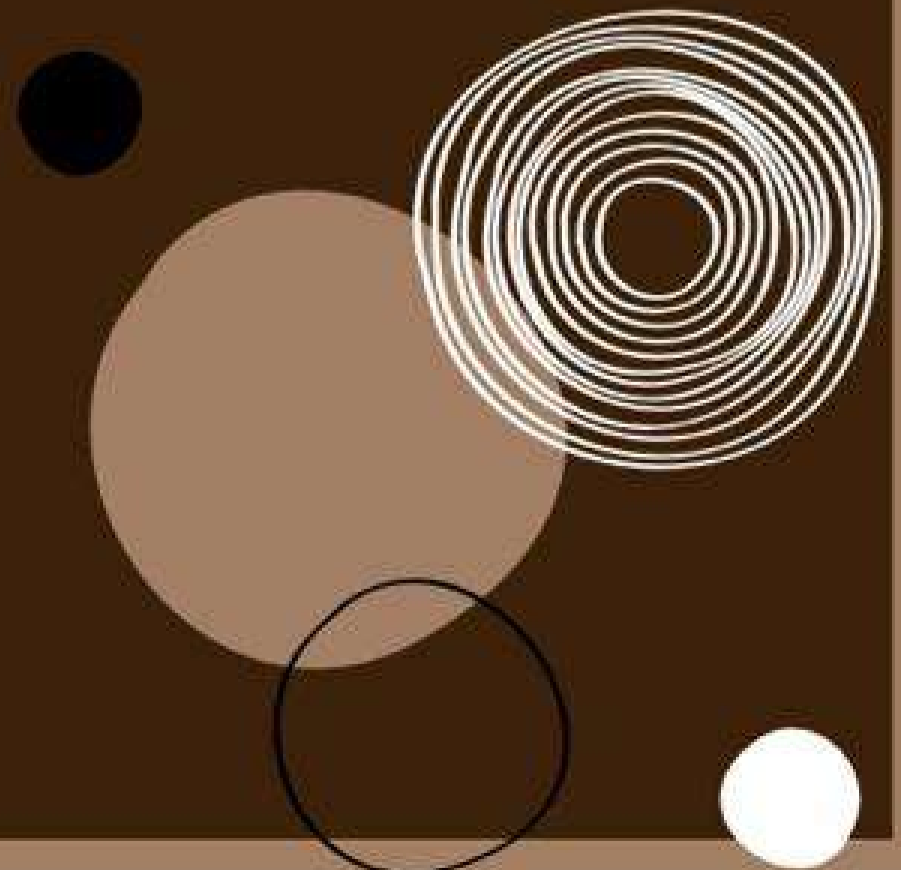
The aim for me writing this article isn't ruling out the blow to the economy, but to shed a light on the opportunities that we as a nation can seize. We will definitely have a tough time but some factors would smoothen the revival phase. The robust administration and policy framework under strong leadership will definitely act as a catalyst to put back the pieces together. The slump in crude oil prices will bring down the burden of government on gas subsidy which will positively impact the economy. Most companies are withdrawing their capital from China, as a neighbour India can take the advantage of fleeing capital to boost the economy.

Blows are inevitable part of any economy, all we should focus on is to make the landing smooth and the revival swift. For this we need to look beyond the obvious and try to harness the potential of underlying opportunities. Shifting a little from the economic discipline I would like to end by saying : Pain is inevitable, suffering is a choice. So how so gloomy your days are, look around and you will find that spark, harness it and you will shine again.

- **AVANI PRASAD**  
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- Covid and Global politics interpretation by Professor Arun



# COVID -19 OUTBREAK, MIGRATION AND EFFECTS ON SOCIETY



Covid 19 has had a huge impact and brought in tremendous change in our society, not only society but also to the entire world. Covid 19 also known as corona virus has affected our society with lot of problems. Day to day life has been affected for everyone, right from the poor to the rich. In this article I would like to concentrate on the impact, changes and some of the problems faced by the people. As the first instance, virus instilled a lot of fear, panic and anxiety among people. Lockdowns were a mandate in all countries; governments were strict regarding the rules of the lockdowns due to the spread of the virus. Some people were given shelter but no food because of this reason, there was high incidence of mortality. Concentrating on the people who at least had their basic facilities has also suffered because of no job and money.

## **Mentality of the society**

Concentrating on the corona virus survivor have gone through a lot of pain mentally and physically. The society has different behaviour where many people come for help and many others do not support the society. Majority population of the society are affected by the virus. Society has treated these people differentially. Most of the neighbour avoid them by not touching them, talking to them or any kind of physical interaction. This situation is created an emotional effect in the minds of the people due to discriminatory treatment by their own neighbours. It is not very easy to be quarantined, as it puts a lot of emotional pressure and turmoil. The other part of the society is supporting and helping the affected people.

## **Effects on the society**

The behaviour of the people is changed, the new normal talks about wearing mask 24/7 and to follow social distancing. Change is something which is always constant, people must learn and adapt to the new changes, to accept it as the new normal and focus on living in the world. There was also a change in the climate due to the pollution emanated by man and industries, but the covid 19 has made a change in the climate and the environment. There are so many problems faced by the people, due to which government is going through financial burden.

Most of the country has gone through lot of losses, economically the countries have faced the deficit. International trading was stopped, there was no international or foreign trading and exchange took place. International flights were banned, transportation was completely stopped. Majority of the people took a decision to migrate.

Almost all the nations are struggling to slow down the transmission of the disease by testing & treating patients, quarantining suspected persons through contact tracing, restricting large gatherings, maintaining complete or partial lock down etc.

The society adopted to new changes due to the covid19 especially with regard to wearing mask and following social distancing. New normal of adapting oneself to attend online classes from changing our behaviour to make ourselves safe and secure. As a responsible citizen everyone should adapt to changes and support rules and regulations of the government in order to make things function accordingly. As being an integral part of the society it is every one's responsibility to cooperate and accept the new changes and support the society.

### **Reverse migration to Hometowns**

The main people who were affected by the pandemic are the poor people whose livelihood is dependent on daily work and daily wages. Most of the people migrate to cities as a daily worker and earn very minimum amount for their life, they were affected more during the intense period of lockdown - they suffered without food, money and shelter. At the time of the lockdown they wanted to move to their own places in order to take care of their families. Due to the lockdown in the time of pandemic, the transport system was completely frozen, because of this reason most of the people moved by walking miles of kilometres without food and water, there are many articles which stated that most of the people died due to the treachery of long journey by walk without access to basic needs. Many college students and youngsters volunteered through provision of basic facilities to the people who suffered without food and shelter.

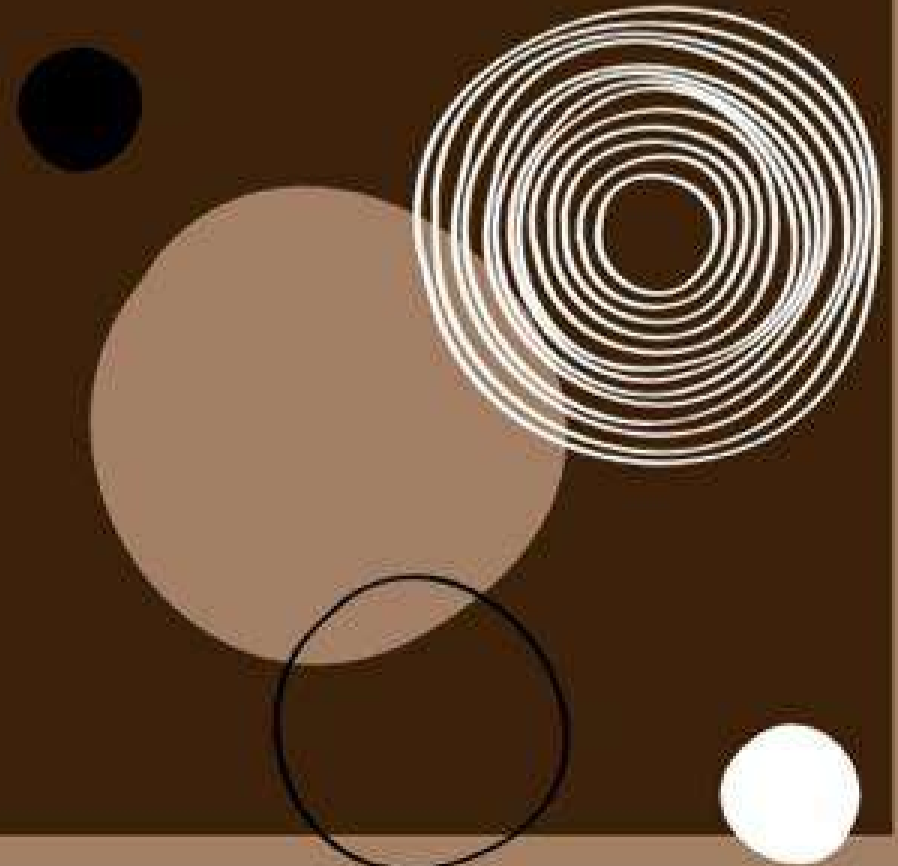
### **Conclusion**

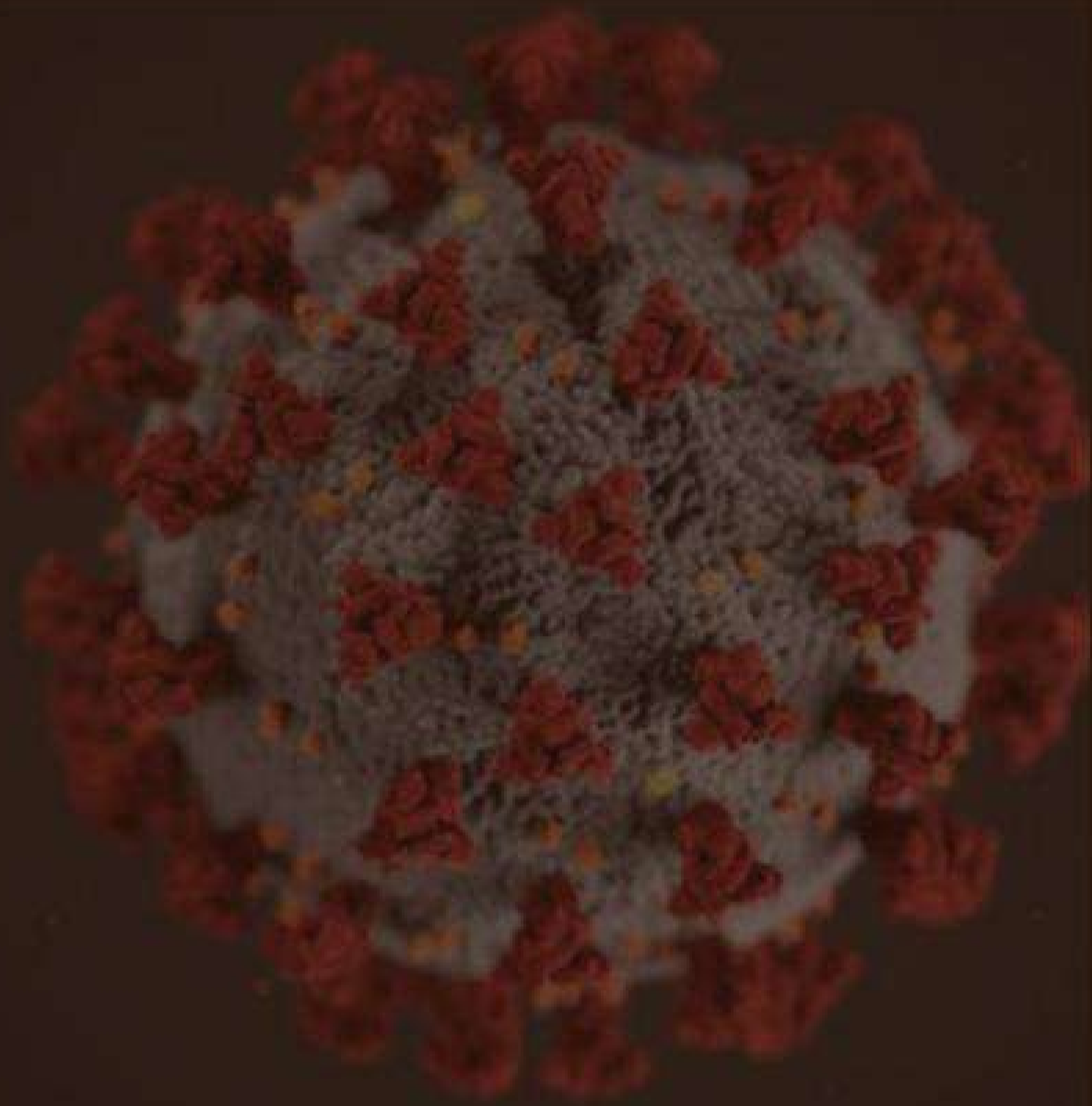
As the corona virus had affected all the countries - all doctors, government servants, scientists and other support staff are fighting the battle to keep the society safe. There is good in bad and bad in good, the covid has made us to fight together and be safe and it also helped in protecting and healing the environment on one side but on the other side, has adversely affected the people and the economy. Many people suffered due to the virus, majority population of the world underwent the virus attack, most of them lost their life. Government and doctors are fighting against the virus on the other hand there is also displacement of normal lives for the people with respect to basic facilities due to which people started migrating from the cities to their respective villages. Most of them went by walk to reach their destination with out food some died in the journey of reaching their destination. The pandemic has affected the society and the entire world. In order to support the entire society, it is our responsibility to join hands, support and follow the rules and regulations of the government and accept the new normal of accepting designated changes. It is very important to be cautious and it is also very important to take preventive measures regarding changes because of the pandemic.

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WITH PANDEMIC CAME MANY  
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UNDERLYING CURRENTS OF  
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EMBRACE THE CHALLENGES  
WHILE MAKING THE MOST  
OUT OF THE OPPORTUNITIES