

# COVID-19 Pandemic- Revisiting the Myths.

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## Abstract:

Corona virus disease also known as Severe acute respiratory syndrome corona virus -2(SARS-CoV-2) which originated from Wuhan in China has engulfed the whole globe. A lot of panic has been created in the whole world because of this disease. There are many queries and misconceptions regarding this disease and people tend to believe every little thing that is circulated in the society without confirming it. This review article has thrown light on the myths and false news doing round about the disease and its outcome and spread.

**Keywords:** COVID-19, corona virus, fever, china, disease, myths.

## Introduction

**“The world is a place that is so interconnected that what happens in other part of the world will impact us”. – Anthony S. Fauci.**

As stated by sir Anthony this quote is the appropriate example of today's pandemic cause by covid-19. COVID-19 that is Corona virus disease of 2019. A virus that has taken the whole world by storm. This novel virus has become one of the greatest challenge worldwide and every person living on this planet is facing hardships due to the outbreak of this virus. This virus which originated from china has spread like a wildfire in different nations.

Coronaviruses are a group of related viruses that cause diseases in mammals and birds. In humans, coronaviruses cause respiratory tract infections that can range from mild to lethal illness. Mild illnesses include some cases of the common cold (which has other possible causes, 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 yet to be vaccines or antiviral drugs to prevent or treat human coronavirus infections.

Coronaviruses constitute the subfamily Orthocoronavirinae, in the family Coronaviridae, order Nidovirales, and realm Riboviria. They are enveloped viruses with a positive-sense single-stranded RNA genome and

a nucleocapsid of helical symmetry. The genome size of coronaviruses ranges from approximately 26 to 32 kilobases, one of the largest among RNA viruses. They have characteristic club-shaped spikes that project from their surface, which in electron micrographs create an image reminiscent of the solar corona from which their name derives.[1,2]

In March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. Since Dec 8, 2019, several cases of pneumonia of unknown aetiology have been reported in Wuhan, Hubei province, China. Most patients worked at or lived around the local Huanan seafood wholesale market, where live animals were also on sale. In the early stages of this pneumonia, severe acute respiratory infection symptoms occurred, with some patients rapidly developing acute respiratory distress syndrome (ARDS), acute respiratory failure, and other serious complications. On Jan 7, a novel coronavirus was identified by the Chinese Centre for Disease Control and Prevention (CDC) from the throat swab sample of a patient, and was subsequently named 2019-nCoV by WHO.[3-5]

After a great amount of research, the doctors and scientists have come up with ways of prevention and are nearing the cure but not everything is known about the disease till date. A lot of research is still going relating to the disease. Doctors and scientists and other health professionals are working tirelessly day and night to fight against this disease. But some sections of the society still can't understand the intensity of the situation and continue to worsen it. As it is said- Half knowledge is always dangerous. This stands true in every situation. Although all is not known about covid -19 but there are many myths and rumours doing the rounds. Unknown facts and myths are much more dangerous and can cause more harm to the society than the virus itself. One should be completely aware about the news and should have proper knowledge before circulating any kind of information as it is important for people to understand that any negligence might cost people their lives.! [6]

We would like to share and talk about some myths that had led people to believing that these things might help curing Corona or in any case might be

related to the these. But these myths are either false or incomplete and can lead to more difficulties.

**Myth:**Exposing yourself to the sun or to temperatures higher than 25C degrees prevents the coronavirus disease (COVID-19).

No matter how hot the temperature is, your chances of catching covid 19 will remain the same. Temperature has very little effect on virus and there is little or no proof linking the affect of temperature with the death of the virus. [7]

**Myth:**People cannot completely recover from the disease after getting affected by Covid-19.

Most of the people who catch COVID-19 can recover and eliminate the virus from their bodies. If you catch the disease, make sure you treat your symptoms. If you have cough, fever, and difficulty breathing, seek medical care early – but call your health facility by telephone first. Most patients recover thanks to supportive care. [8]

**Myth:**Being able to hold your breath for 10 seconds or more without coughing or feeling discomfort means you are free from the coronavirus disease (COVID-19) or any other lung disease.

The most common symptoms of COVID-19 are dry cough, tiredness and fever. Some people may develop more severe forms of the disease, such as pneumonia. The best way to confirm if you have the virus producing COVID-19 disease is with a laboratory test. You cannot confirm it with this breathing exercise, which can even be dangerous.

**Myth:**Drinking alcohol protects you against COVID-19 and is not dangerous.

Frequent or excessive alcohol consumption can increase your risk of health problems.

**Myth:**COVID-19 virus cannot be transmitted in areas with hot and humid climates

From the evidence so far, the COVID-19 virus can be transmitted in ALL AREAS, including areas with hot and humid weather. Regardless of climate, adopt protective measures if you live in, or travel to an area reporting COVID-19. The best way to protect yourself against COVID-19 is by frequently cleaning your hands. By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth, and nose.

**Myth:**The new coronavirus CAN be transmitted through mosquito bites.

To date there has been no information nor evidence to suggest that the new coronavirus could be transmitted by mosquitoes. The new coronavirus is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of saliva or discharge from the nose. To protect yourself, clean your hands frequently with an alcohol-based hand rub or wash them with soap and water. Also, avoid close contact with anyone who is coughing and sneezing.

**Myth:**The hand dryers are most effective in killing Corona virus.

No. Hand dryers are not effective in killing the 2019-nCoV. To protect yourself against the new coronavirus, you should frequently clean your hands with an alcohol-based hand rub or wash them with soap and water. Once your hands are cleaned, you should dry them thoroughly by using paper towels or a warm air dryer. One should wash their hands for at least 20-30 seconds.

**Myth:**Thermal scanners can detect the presence and absence of virus as well.

Thermal scanners are effective in detecting people who have developed a fever (i.e. have a higher than normal body temperature) because of infection with the new coronavirus.

However, they cannot detect people who are infected but are not yet sick with fever. This is because it takes between 2 and 10 days before people who are infected become sick and develop a fever.

**Myth:** Older people are more susceptible to covid 19 than the younger generation. [8]

People of all ages can be infected by the new coronavirus (2019-nCoV). Older people, and people with pre-existing medical conditions (such as asthma, diabetes, heart disease) appear to be more vulnerable to becoming severely ill with the virus.

WHO advises people of all ages to take steps to protect themselves from the virus, for example by following good hand hygiene and good respiratory hygiene.

**Myth:**The antibiotics are effective in the treatment of corona virus.

The new coronavirus (2019-nCoV) is a virus and, therefore, antibiotics should not be used as a means of prevention or treatment.

However, if you are hospitalized for the 2019-nCoV, you may receive antibiotics because bacterial co-infection is possible. [8-11]

**Myth:** Garlic and honey are helpful in curing the disease.

Garlic is a healthy food that may have some antimicrobial properties. However, there is no evidence from the current outbreak that eating garlic has protected people from the new coronavirus. [8,10]

**Myth:** The acid in our stomach kills the virus if we drink enough water

Most viruses can survive exposure to stomach acids. If you drink more water, the acid in your stomach would be diluted, much as we dilute acid in a chemistry laboratory by adding water to it. So one would expect any effect of the acid to be weakened, not strengthened if you drank more water.

The novel coronavirus affects our respiratory tract, leading to difficulty in breathing which is a characteristic symptom of COVID-19. The stomach has nothing much to do with the virus and the acid in the stomach would play no role either. [8,11]

**Myth:** Clapping hands creates vibrations that destroy the coronavirus

Clapping hands creates sound waves. The sound that is created is sensed through the vibrations of our eardrums which then creates oscillations in the fluid in our inner ear. A virus is about a million times smaller than the size of the eardrum and would hardly even sense these vibrations. There is absolutely no reason to believe that this could be true. [10]

**Myth:** Religious chants can kill the virus

The same argument can be applied here as the earlier answer. The vibration created by chanting would not even be sensed by something as small as a virus. Top of Form

From colloidal silver to essential oils, myths continue to abound on social media about home-grown remedies to treat or prevent COVID-19. We asked Gautam Menon, Professor of Physics and Biology at Ashoka University, Sonipat and Institute of Mathematical Sciences, Chennai to lay some of these myths to rest. You can also check out answers

to some commonly asked questions about COVID-19 here.

**Myth:** Curfews like 'Janata curfew' implemented on 22<sup>nd</sup> March in India are enough to kill the majority of viruses.<sup>5</sup>

The novel coronavirus which causes COVID-19 can multiply in infected people and is mainly transmitted between people who are in close contact with one another. It can be transferred through droplets which are produced when an infected person coughs or sneezes, if these droplets reach others nearby, for example when you touch your mouth and nose after shaking hands with someone. This is the main way in which the virus moves from person to person, although this can also happen when someone touches a surface where droplets containing coronavirus have lodged. [8]

The novel coronavirus can survive for varying amounts of time on different surfaces, ranging from a few hours to a few days, so a 14 hour curfew period is hardly enough to kill all or even most of them from public surfaces, although the longer-term lockdown should help in this. Indeed, if a lockdown were sufficient to get rid of viruses, all of our health problems arising from viruses would have been solved by just asking everyone to stay home one day in a year. What is true, however, is that every bit of physical distancing helps to break the chain by which infected people keep infecting people who don't have the disease. This is the real purpose behind the lockdown. It can also allow those who have the disease to be identified and quarantined more easily.

**Myth:** The Indian immune system is better than the west and thus Indians will survive COVID-19 infection better. [8-12]

If this were indeed true, Indians would be the healthiest people in the world, with a life expectancy exceeding those from other nations. In fact, India ranks 128<sup>th</sup> in the world in terms of life expectancy. The influenza pandemic of 1918 hit India hardest out of the countries of the world, with between 5-10% of Indians dying from it.

India has 7 of the 10 most polluted cities in the world in terms of air quality as well as the second-highest number of diabetics in the world. Both of these mean that Indians might be more likely to have adverse outcomes when exposed to the coronavirus.

For a virus that our bodies have not seen before, such as the novel coronavirus, it doesn't seem likely that there should be any component of immunity that might protect Indians but not others.

**Myth:** If I am young and healthy, I don't need to follow precautionary steps or physical distancing

While you might manage to beat the infection, you should also think of those around you who may be elderly or infirm or simply have weaker immunity. Do you want to be responsible for the illness they might contract? Another point is that there have been a few cases of death and serious illness in even young and healthy patients, for reasons no one really understands. So being young and healthy doesn't mean you can escape, both the disease as well as its consequences for others.[8-12]

### Conclusion:

Like these myths, there are many more doing the rounds. And people with very little knowledge tend to believe such things. If people continue to spread rumours and if they do not co-operate with the government and medical officials, it'll be the most difficult thing to overcome. It is important for us to be together and work as one to defeat this. We are all in this together and everyone is facing difficulties, some more than the others but one should not lose hope and faith. In times like these it is important to be aware, and it is important for everyone to spread the right information for the betterment of people. One day all of this will be over but till that day everyone has to stay strong. To conclude, it is important that people should understand the gravity of the situation and they shouldn't panic. Guidelines created by the government and medical personnel are very important and should be followed strictly. The whole globe is affected by this pandemic and it'll take a lot of effort and help from every part of the society.

As is said,

"UNITED WE STAND, DIVIDED WE FALL". This is our time to stay together and to fight everything together. It's us against this disease. We shouldn't let this disease break us down.!

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