

# A Review of the Prevention of the COVID-19

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ABSTRACT: One of the 21st century's major threats is environmental change. In spite of all their efforts over the last few decades to restore nature, humans could only move a few steps forward, not to the degree of commendable. The emergence and spread of the current 2019 coronavirus (2019-nCoV) or the severe acute respiratory syndrome coronavirus 2 is presenting the world with a new public health crisis (SARS-CoV-2). The virus originated in bats and was transmitted to humans in December 2019 in Wuhan, Hubei province, China by still unknown intermediate animals. Around 96,000 confirmed coronavirus disease cases have been reported in 2019 (COVID-2019) and 3300 reported deaths to date (05/03/2020). But the effects of the COVID-19 pandemic have, over the last few months, effectively restored the atmosphere to a significant degree, which could certainly have a positive effect on global climate change. It is of course, affects the everyday's actions of humans and the ecological environment around them. This review paper discusses the prevention of the COVID-19 to aware about the COVID-19 and its prevention to nullify the effects.

KEYWORDS: Coronavirus; Economy; Education; Environment; Family.

#### **INTRODUCTION**

Several corona viruses are known to cause respiratory infections in humans, ranging from the common cold to more serious diseases like Middle East Respiratory Syndrome (MERS) and Extreme Acute Respiratory Syndrome (SARS). In December 2019, in Wuhan, Hubei province, China, a new infectious respiratory disease emerged and was called COVID-1919 by the World Health Organization (coronavirus disease 2019). This is due to a newly discovered corona virus type, known as SARS-CoV-22 (severe acute respiratory syndrome coronavirus 2). It is essentially a single RNA virus that is stranded. The viral particles of SARS-CoV-2 are spherical and have mushroom-shaped proteins called spikes protruding from their surface, giving a crown-like appearance to the particle. The spikes attach to human cells and allow the entry of the virus. The novel corona virus spike protein shares a 98 percent sequence identity with the bat coronavirus spike protein. The researchers found that the SARS-CoV-2 spike protein binds to the angiotensin-converting enzyme 2 cellular receptor, which is the entry point in human cells. It has a 10 to 20-fold greater affinity for binding than SARS. The higher binding affinity allows higher transmission from human to human.

Regardless of the degree of virus effect on the citizens of individual nations, it has had a severe impact on global and national economies. There is no border, no religion and the novel corona virus spread beyond cast and creed. In nature, it is extremely infectious and easily unpredictable. This kind of pandemic, where we are in a race to create a vaccine against its spread, has never been planned for the world.

The new COVID-19 seemed to be very infectious and spread globally rapidly. There were a minimum of 52,869 deaths and 10,10,066 confirmed cases of this coronavirus pandemic as of April 03, 2020. Reported cases rose to 46,79,511 on May 18, 2020, with deaths of 3,15,005. These numbers are rapidly changing. There are four stages of transmission of the novel coronavirus, namely stage 1 (imported cases), stage 2 (local transmission), stage 3 (community transmission) and stage 4 (transmission out of control). The term transmission refers to the transmission of microorganisms from one infected individual to another uninfected person,



either by direct contact, through droplets, or through the spread of illness among humans Or by indirect touch, such as contamination of surfaces. On the WHO website at https://www.who.int/emergencies/diseases/novel-coronavirus-2019, detailed up-to-date information on COVID-19 is available.

The interval between receiving the virus and the beginning of the disease's symptoms is known as the duration of incubation. This varies from 1-14 days for COVID-19, but most commonly about five days. Fever, weakness and dry cough are the most common symptoms of COVID-19. Aches and pains, nasal congestion, runny nose, sore throat or diarrhea can be present in some patients. Typically, these symptoms are mild and begin gradually. Some individuals become sick, but they do not develop any symptoms and do not feel unwell. Most people (about 70%) recover from the disease without special treatment being required. Around 1 out of every 6 individuals who get COVID-19 gets seriously ill and Difficulty in breathing grows. Older people are more likely to develop serious conditions and those with underlying medical issues such as high blood pressure, heart problems or diabetes.

COVID-19 is an intermediate-host zoonotic disease. Though there is no simple awareness of the intermediate source of origin and transmission to humans. The SARS-CoV intermediate host is the palm civet and camel, while pangolin or snakes are the potential intermediate host for SARS-CoV-2. For all three, the reserve host is Bat. Without getting ill, Bat brings too many viruses and about 200 Corona viruses. So the primary transmission mode is from bats to humans to the intermediate host. COVID-19 can be transmitted directly in the form of droplets formed during sneezing, coughing, speaking, and unintentional inhalation of droplets in the vicinity of an infected individual. Droplets are water-holding entities greater than 5µm in diameter and can be caught within a certain range of approximately 1 m by a healthy person. The indirect transmission is when the virus is deposited on a dead surface such as door bells, lift buttons, stairs, vegetables, fruits, etc. that can often come into contact with healthy people who are resting. The virus enters the eyes, nose and mouth from here, and eventually leads to a new patient with corona. Even the contaminated person's fecal matter is discovered to be the transmitter. It can thus spread by fecal-oral transmission from the source. Studies have shown that the virus reaches the respiratory mucosa through the abundance of angiotensin receptor 2 (ACE2) present in the lower respiratory tract, primarily in alveolar type 2 cells. SARS-CoV uses the same receptor.

It has spread rapidly across the world, presenting the entire human population with immense health, economic, environmental and social challenges. The global economy is being seriously affected by the coronavirus outbreak. Through testing and treating patients, quarantining suspicious individuals by touch tracing, limiting large gatherings, maintaining maximum or partial lock down, etc., almost all nations are trying to slow down the spread of the disease. COVID-19 has spread across the globe and has significantly impacted many industries and associated economies. The effect of COVID-19 on biodiversity is defined in this review article, and the potential ways in which the disease can be regulated have also been addressed.

## **PREVENTION AND CONTROL OF COVID-19**

COVID-19 is a worldwide hazard requiring a global duty to provide precise information to save people's lives from new diseases. Public health and infection prevention initiatives are urgently required to restrict the global outbreak of the virus in order to reduce the damage associated with COVID-19. Staying at home and working from home standards should be



observed during the lockout. Yoga increases immunity, which is a need of the hour, so it should be exercised. COVID-19 is transmitted by direct contact from person to person, so an essential tool to save public health is to avoid transmission restrictions in mass collection. The transmission of respiratory diseases during mass events is also a significant public health issue with the potential for these infectious diseases to be transmitted.

In terms of minimizing risk of COVID-19 transmission, some precautionary measures have been recommended by the WHO, such as avoiding close contact with people with acute respiratory disease, frequent hand washing with soap and water or hand sanitizer, particularly after direct contact with sick people or their environment, maintaining the etiquette of cough, and avoiding unprotected contact with face It is highly recommended that individuals stop regular touching of the face and clean their teeth under running water for 20 seconds. The best way to prevent infection is social distancing and isolation or quarantine. The Govt., all forms of religious, cultural, social, postponed from different nations.

In various parts of the globe, science, sport, and political mass gathering activities. Media and information technology provide society with substantial support for the prevention and monitoring of the outbreak of COVID-19. So, the primary preventive technique for COVID-19 may be to limit mass gathering. All precautionary measures are taken by almost all governments and large budgets for their countries are also sanctioned. There are no precise antiviral drugs or vaccines to date for COVID-19.

There are, however, several ongoing clinical trials testing new therapies. Therefore, time is urgently required to develop a safe and stable vaccine for COVID-19. In laboratory tests and in-vivo studies, anti-viral drugs such as chloroquine and hydroxychloroquine were found to be effective against COVID-19[1]. A recent study showed that in the control of 2019-nCoV in vitro, remdesivir and chloroquine were highly successful. Since SARS-CoV-2 is an RNA virus, the most promising alternative could be any vaccine that is effective against other RNA viruses such as measles, polio, encephalitis B and influenza. In order to stop and monitor COVID-19 infections, science will continue to play an important role in developing new medicines or vaccines.

## CONCLUSION

While humans are a superpower and the corona has proved guns that are capable of destroying the entire world, but even though humans make a mess with nature, nature itself is able to kill humans with this tiny virus that has very normal symptoms such as cold and cough. The best way to avoid and hamper transmission is to cover yourself and via regular washing of hands or using an alcohol-based infection, others also rub, do not touch the lips, and obey expectations of social distance. If anyone has to go out of home due to an urgent job, use of the mask is helpful. Staying at home and operating from home should be practiced during the lockdown. Different businesses do not operate and all modes of transport are reduced or cancelled, such as aircraft, rails, buses and private cars.

Yoga is the best methods for good health which rejuvenates our body in terms of enhancing our immunity system, concentration of mind and confidence levels. Spiritual development is essential for immunity, humanity and positive personality development. There are a number of online yoga classes given by the experts, which is proving the utilization of lockdown time fruitfully. No need to worry about the future because time heals everything. If there are negative



impacts, we have various positive things to learn from this. The COVID-19 has proved that Nature has provided us with all the resources for leading a beautiful life and she nourishes us like a mother, humans should respect and nurture her. Indiscriminate development and overexploitation of natural resources should be minimized at the level of sustainability.

#### REFERENCES

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