

## REVIEW ARTICLE



## ORIGIN, SYMPTOMS, TRANSMISSION AND PRECAUTIONARY CONTROL OF PANDEMIC CORONAVIRUS DISEASE (COVID-19): A MINI REVIEW

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### ABSTRACT

In the mid of December 2019, a novel human coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was discovered in Wuhan, Hubei Province of China. On February 12, 2020, WHO named the disease caused by the novel coronavirus as Coronavirus Disease 2019 (COVID-19). Corona viruses are a group of viruses that can cause illnesses from common cold to severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) or pneumonia like symptoms. Mode of transmission from one body to another remains frequent and includes coughing, shaking hands, touching contaminated surfaces and getting in contact with infected pets/animals. It generates symptoms from common cold to pneumonia like symptoms. Persons with existing medical conditions worsen condition by serious illness. As there is no vaccine or approved treatment therefore by applying precautionary measures, we can forbid us from the risk of getting infected.

**KEYWORDS:** nCoV-19, COVID-19, SARS-CoV-2, Transmission, Treatment

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### Quick Response Code



### INTRODUCTION

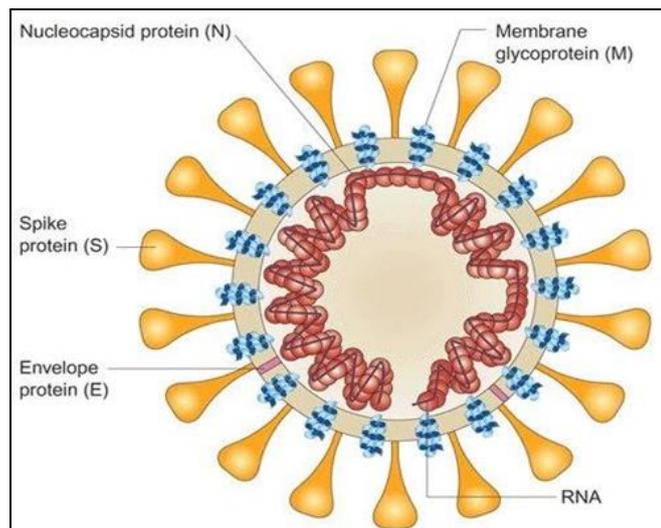
In the mid of December 2019, a novel human coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was discovered in Wuhan, Hubei Province of China [1]. In the following weeks, infections spread across China and other countries across the world and declared as pandemic. The Chinese public health, clinical, and scientific communities took brief reaction to take into consideration the new corona virus and shared the viral gene sequence to the world.

On January 30, 2020, the World Health Organization (WHO) declared the outbreak a Public Health Emergency of International Concern (PHEIC). On February 12, 2020, WHO named the disease caused by the novel coronavirus as Coronavirus Disease 2019 (COVID-19) While a lot is still unknown about the corona virus that causes COVID-19. It is

transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). People can also be infected indirectly through touching surfaces contaminated with the virus and touching their eyes, nose and mouth or other perforated body cavity. While COVID-19 keeps on spreading it is significant that communities take action to prevent further transmission, decrease the outbreak rate and support control measures.

Corona viruses are a group of viruses that can cause illnesses from common cold to severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) or pneumonia like symptoms [2]. In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China. The virus is currently known as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) [3]. In March 2020, the World Health Organization (WHO)

proclaimed the COVID-19 outbreak a pandemic (global outreach) [4].



**Figure 1: Structure of Novel Coronavirus (2019-nCoV)**

### Mode of Transmission [5]

The mode of transmission is highly frequent from one body to another (directly & indirectly) as follows-

1. Coughing (droplets from throat swab covers up to 2-meter range)
2. Infected pets or other animals
3. Shaking hands
4. Touching non-living contaminated surfaces i.e. desks, phones etc.

### Symptoms of COVID-19 [6]

Depending on the immunity of person, signs and symptoms of coronavirus disease 2019 (COVID-19) may appear within 02 to 07 days after exposure. The time after invading (exposure) and before having symptoms is called the incubation period in which it replicates to increase its count. Common signs and symptoms can include:

- ✓ High Fever
- ✓ Sneezing/Dry Cough/Unpleasant sensation in throat area
- ✓ Fatigueness
- ✓ Shortness of breath or difficulty in breathing
- ✓ Body/Muscle aches

The severity of COVID-19 can range from mild to severe. Some people may have only a few

indications and few people experience life threatening / serious outcomes. Those who are older or existing chronic medical conditions, such as heart disease, severe obesity, chronic kidney, lung diseases, liver disease or diabetes remains much prone to get suffered from COVID-19 rapidly in deadly manner. Persons with lean body figure and weak immune system may be at higher risk of serious illness.

### Precautionary Measures [7]

Although there is no vaccine available to prevent COVID-19, you can take steps to reduce your risk of infection. WHO and CDC recommended following safety measures for escaping COVID-19:

- Frequently wash your hands with soap, water and alcohol-based sanitizer.
- Avoid touching your face- eye, mouth, nose in crowd.
- During coughing and sneezing cover your nose and mouth with your bent elbow or a tissue.
- If you have a fever, cough and difficulty in breathing, seek rapid medical facilities.
- Self-isolation/quarantine
- Follow social distancing (up to 2 meters)

### CONCLUSION

COVID-19 is a highly contagious disease that has become a worldwide pandemic. It is greatest challenge world is dealing with. As symptoms are more similar to pneumonia that's why it is termed as pneumonia associated corona virus. It remains necessary to be away from anyone whoever meets with above said symptoms. There is no full proof treatment or vaccine for nCoV-19 therefore mankind can be safe by staying at home or self-isolation/quarantine.

Thus, avoiding the chances to be come in contact with infected person's cough swab/droplets and any means of getting engaged physically. Vaccine against novel coronavirus is under clinical trials/testing in various countries worldwide after getting approved definitely it would become a satisfactory way to eradicate COVID-19 completely.

This review is going to make knowledgeable everyone who seeks to know about this deadly virus and disease as well in reference to history, symptoms and preventive measures of COVID-19.

Definitely, this review will unfold scientific data and discard myths over this global pandemic issue.

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### **CONFLICT OF INTEREST**

No conflict of interest.

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