



RESEARCH ARTICLE

Novel Corona Virus Disease: A Review

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ABSTRACT

Covid-19 is a viral disease, which communicates by respiratory organs. This is a pandemic disease spread all over the world. All country of the world, which is infected by this virus search out so many, causes and infects the organs on the human beings but no sufficient prevention search by any county of the world. In the meantime, India recently searches a medicine like co-vaccine but not 100% sure for treatment. Now scientists or researchers prepare a day's many countries of the world try again and again for the treatment of COVID-19 but no specific vaccine. So according to WHO guidelines for safety like a facemask, sanitizers, and social distancing are followed by people.

Keywords Covid-19, Disease, Pandemic.

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INTRODUCTION

Coronavirus disease is communicable respiratory tract viral infectious diseases, which are caused by a novel coronavirus (n-CoV) that comes from SARS (severe acute respiratory syndrome) and that is why it also is known as corona virus-2 (SARS CoV-2). This disease is spread from infected animals to humans. Firstly, it causes respiratory illness and it has become a more severe disease.^[1] Coronavirus word is derived from corona means Crown. Coronavirus consists of single-stranded RNA. Structurally its looks like club-shaped glycoprotein spikes which project on their surface to facilitate entry of host cells. It consists of envelope protein to covers all over the surface and nucleocapsid protein.^[2] The WHO declared the virus a global pandemic on 11 March 2020 and said it was “deeply concerned by the alarming level of spreads and severity” of the outbreak.^[3]

2. CLASSIFICATION

Realm-	Riboviria
Kingdom-	Orthonavirae
Phylum-	Pisuniricota
Order-	Nidovirales
Family-	Coronaviridae
Sub-family-	Orthocoronavirinae
Genus-	α-coronavirus, β-coronavirus, γ-coronavirus, δ-coronavirus

MODE OF TRANSMISSION

This disease is spread from infected animals to humans.^[4]

- Respiratory droplets such as coughing, sneezing.

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- Person to person through contacts such as handshaking.
- Gathering of persons.
- Touching surface or object with a virus on it, and then touching your mouth, nose, or eyes before washing your hands.
- Fecal contamination.
- This virus emerged from an animal source but now seems to be spreading from person to person.

INCUBATION PERIOD

2 to 14 days.^[5]

WHAT DOES CORONA TO THE BODY?

The coronavirus enters our body via the nose, eye, ear, and mouth. They cause swelling in the respiratory system, which can make it narrow for the lungs to pass oxygen into the bloodstream. After that, it leads to organ failure and death.^[7]

SYMPTOMS

- Sore throat
- Runny nose
- Coughing
- High temperature
- Fever
- Muscle pain and fatigue
- Difficulty in breathing like pneumonia
- Organ failure and death
- Loss of smell or taste ^[8]

STAGES OF COVID 19

- STAGE 1- In this stage, cases are imported from affected countries without spread locally.^[9]
- STAGE 2- In this stage, local transmission happens when they come in contact with outside countries.^[10]
- STAGES 3- In this stage, viruses are transmitted from human to human in the community.^[11]

- STAGE 4- In this stage outbreak will spread fast in clusters of the community. It also is known as an epidemic.^[12]

DIAGNOSIS

The Indian council of medical research (ICMR) launch antibody rapid test kits that are RT-PCR (Reverse Transcription polymerase chain reaction) kits. It gives faster results and is known as “gold standard” for Covid-19 diagnosis.^[13]

PREVENTION AND CONTROL

- Aware of people
- Detection of cases
- Isolate infected patient
- Stay home stay safe
- Maintain social distance at least 2 meter.
- Washing our hand at least 20 second
- Avoid gathering^[14]
- Not touching our face
- Take proper nutrients
- Cough and sneeze into the elbow
- Disposed of used tissues
- Avoid all non-essential travels

LIFE CYCLE ^[6]

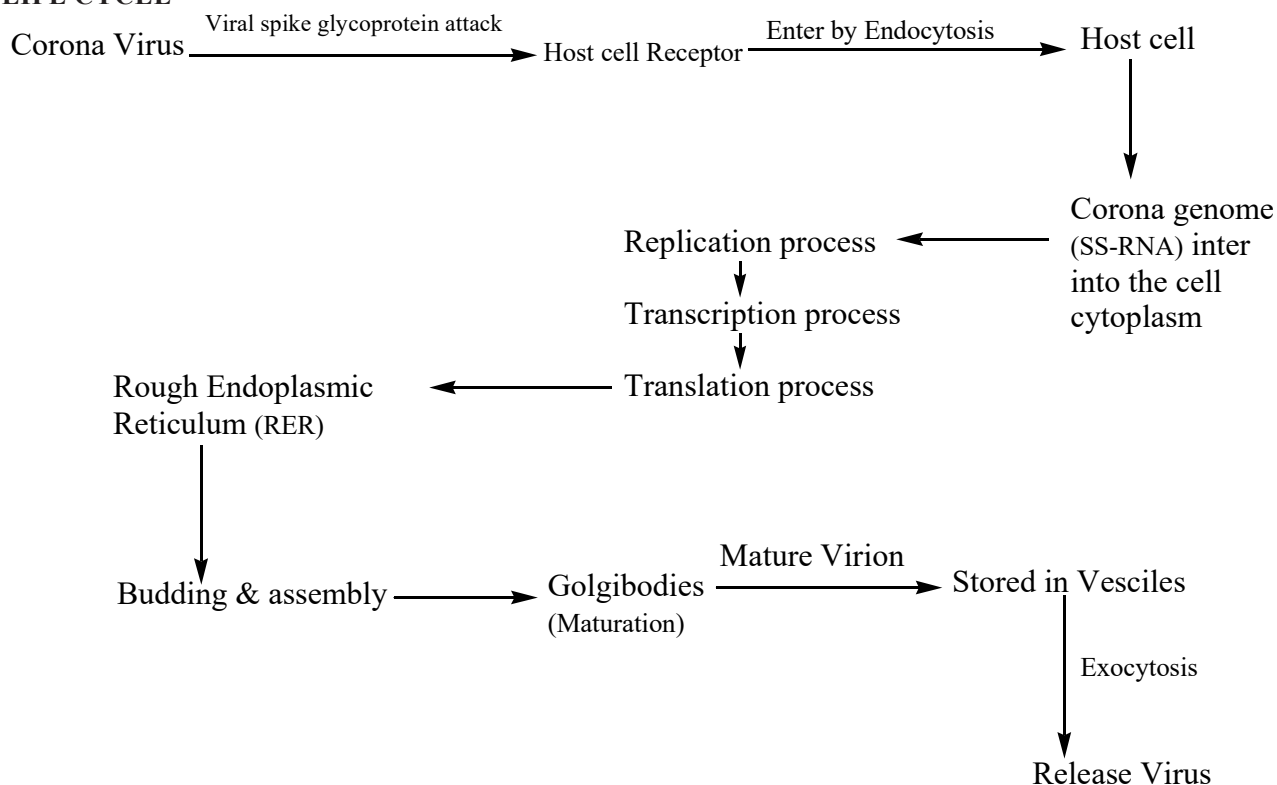


Figure : Life cycle of Corona Virus (Covid-19)

TREATMENT

Name of drugs	Category	Route of administration	Drug working procedure
Hydroxychloroquine	Anti-malaria	Oral tablets	It is used to prophylaxis for high-risk close contacts, health workers, and frontline workers (unprotected workers). It is not approved for severely ill patients.
Remdesivir	Antiviral	Intravenous	It is used to hospitalize patients on oxygen with moderate Covid-19.
Favipiravir	Antiviral	Oral tablets	It is used mild to moderate disease.
Glucocorticoids	Corticosteroid	Intravenous	It is used to severely ill patients with progressive deterioration of oxygenation indicators, rapid worsening and cytokine storm.
Dexamethasone	Corticosteroid	Intravenous or tablet	It is used to severely ill patients on invasive ventilation or oxygenation. It does not help with mild or moderate disease.
Tocilizumab	Monoclonal antibody	Intravenous drip	It is used moderate to severe disease.
Convalescent Plasma	Plasma therapy	Transfusion	It is used to patients with a moderate disease whose oxygen requirement is progressively increasing despite the use of steroids. ^[15]

- Work from home if possible
- Wear a mask on face ^[15]

CONCLUSION

Coronavirus is widely spread throughout the world. Every infected person is a “transportable bomb”. They affect large scale either economically or mentally. During the coronavirus outbreak rupture, our financial condition and many people are losing their job. For this reason, proper nutritional products are not consumed, so immunity decreases, and people may be affected easily.

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