

# A thorough study on Corona Virus (COVID-19): - A Pandemic Massacre

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**Abstract – Background and Objectives –** Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe disease such as Middle East Respiratory Syndrome (MERS) & Severe Acute Respiratory Syndrome (SARS). **Method –** We looked for articles published on the strategies for treating substance use disorder in PubMed and Google Scholar. We also included quantitative studies of patients receiving covid therapy from community hospitals through different journals.

**Results –** A total of 15 articles are identified of which 6 were full-text reviews, 6 case studies were included and 3 were editorial letters. The incidence of COVID-19 caused a major drift in the economy as well as mental and physical status of the populations worldwide. Major vaccines and treatments are employed form which 2 vaccines are made in India.

**Conclusion and Interpretation –** With the latest COVID-19 deaths reported to WHO now exceeding 3.3 million, based on the excess mortality estimates produced for 2020, we are likely facing a significant undercount of total deaths directly and indirectly attributed to COVID-19.

**Key words –** COVID -19, India, Corona Virus, Prevention.

## INTRODUCTION

### HISTORY AND ORIGIN:

The name "coronavirus" is derived from Latin corona, meaning "crown" or "wreath", Coronaviruses are a group of related RNA viruses that cause diseases in mammals and birds. In humans, these viruses cause respiratory tract infections that can range from mild to lethal. The first case of corona virus was discovered in 1930s, when an acute respiratory infection of domesticated chickens was shown to be caused by infectious bronchitis virus (IBV). They are enveloped viruses with a positive-sense single-stranded RNA genome and a nucleocapsid of helical symmetry.

Human coronaviruses were discovered in 1960s.

Coronaviruses are large, roughly spherical, particles with bulbous surface projections. The average diameter of the virus particles is around 125 nm (.125 μm). The diameter of the envelope is 85 nm and the spikes are 20 nm long. Peoples can get the infection through close contact with a person who has symptoms from the virus includes cough and sneezing. Coronaviruses can cause colds with major symptoms, such as fever, and a sore throat. Coronaviruses can cause pneumonia (either direct viral pneumonia or secondary bacterial pneumonia) and bronchitis (either direct viral bronchitis or secondary bacterial bronchitis).

### SYMPTOMS

COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization.

1.MOST COMMON SYMPTOMS ARE: - Fever, dry cough and tiredness.

2.LESS COMMON SYMPTOMS ARE: - Aches and pains, Sore throat, Diarrhea, Conjunctivitis, Headache, Loss of taste or smell, a rash on skin, or discoloration of fingers or toes.

### METHODS

India's Scenario during COVID 19:

- On 24th March 2020, the Government of India under Prime Minister Narendra Modi ordered a nationwide lockdown for 21 days, limiting movement of the entire 1.3 billion population of India as a preventive measure against the COVID-19 pandemic in India.
- The lockdown was placed when the number of confirmed positive coronavirus cases in India was approximately 500.
- On 14 April, Prime minister Narendra Modi extended the nationwide lockdown until 3 May,

with a conditional relaxation after 20 April for the regions where the spread had been contained or was minimal.

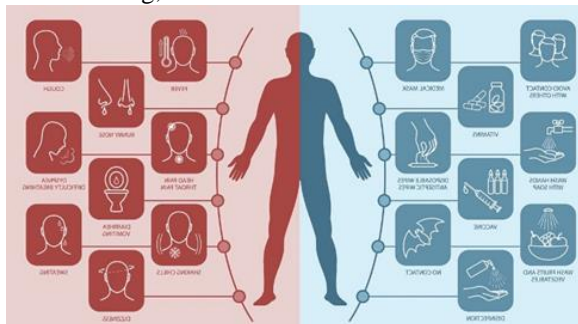
- On 1 May, the Government of India extended the nationwide lockdown further by two weeks until 17 May. The Government divided all the districts into three zones based on the spread of the virus—green, red and orange—with relaxations applied accordingly.
- On 17 May, the lockdown was further extended till 31 May by the National Disaster Management Authority.
- On 30 May, it was announced that the ongoing lockdown would be further extended till 30 June in containment zones, with services resuming in a phased manner starting from 8 June. It is termed as "Unlock 1".

### PRECAUTIONS AND GUIDELIANCES

General public health information issued by World Health Organization: -

To prevent the spread of COVID-19:

1. Clean your hands often. Use soap and water, or an alcohol-based hand rub.
2. Maintain a safe distance from anyone who is coughing or sneezing.
3. Wear a mask when physical distancing is not possible.
4. Don't touch your eyes, nose or mouth.
5. Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
6. Stay home if you feel unwell.
7. If you have a fever, cough and difficulty breathing, seek medical attention.



### TESTING FOR CORONA VIRUS

Two kinds of tests are available for COVID-19: viral tests and antibody tests.

1. A viral test tells you if you have a current infection.

2. An antibody test might tell you if you had a past infection. An antibody test might not show if you have a current infection because it can take 1–3 weeks after infection for your body to make antibodies. Having antibodies to the virus that causes COVID-19 might provide protection from getting infected with the virus again. If it does, we do not know how much protection the antibodies might provide or how long this protection might last.

### METHODS FOR TESTING OF CORONA VIRUS

If people test positive, they should be isolated and the people they have been in close contact with up to 2 days before they developed symptoms should be sought out, and those people should be tested too if they show symptoms of COVID-19.

### TREATMENT AND VACCINATION

To date, there are no specific medicines for COVID-19. Treatments are under investigation and will be tested through clinical trials.

- The antiviral drug “remdesivir” gained emergency use authorization (EUA) from the FDA on May 1, 2020, based on preliminary data showing a faster time to recovery of hospitalized patients with severe disease.
- Also, the low-dose steroid treatment” dexamethasone” is a major breakthrough in the fight against the deadly virus.
- A survey by Genetic Engineering & Biotechnology News (GEN) has revealed that 35 active drug development programs are currently on in North America, Europe and China.
- India has also exported ‘hydroxychloroquine’ used to prevent or treat malaria caused by mosquito bites, for the treatment of corona patients in many foreign countries including USA, Brazil etc.

### VACCINATION PRACTICES

1. Covaxin, India's first indigenously developed vaccine for coronavirus. Bharat Biotech's Covid vaccine candidate Covaxin is set to undergo human clinical trials in July. It was developed at the firm's Genome Valley plant in Hyderabad, in collaboration with the Indian Council of Medical Research (ICMR).
2. CanSino's coronavirus vaccine candidate approved for military use in China. China's military has received

the greenlight to use a Covid-19 vaccine candidate developed by its research unit and CanSino Biologics after clinical trials proved it was safe and showed some efficacy.

3. Dexamethasone and remdesivir included in Covid-19 treatment protocol in India. India has included Gilead's remdesivir in its clinical protocol to treat Covid-19 patients and also advised the use of dexamethasone as an alternative to another steroid being used for managing moderate to severe cases.

4. Oxford University-AstraZeneca Covid-19 vaccine status. The University of Oxford and AstraZeneca Plc.'s experimental vaccine is the first to enter the final stages of clinical trials to assess how well it works in protecting people from becoming infected by the virus that causes the coronavirus disease (Covid-19).

## RESULTS

A total of 44 articles are identified of which 36 were full-text reviews, 6 case studies were included and 2 were editorial letters. The incidence of COVID-19 caused a major drift in the economy as well as mental and physical status of the populations worldwide. Major vaccines and treatments are employed from which 2 vaccines are made in India.

## CONCLUSION

With the latest COVID-19 deaths reported to WHO now exceeding 3.3 million, based on the excess mortality estimates produced for 2020, we are likely facing a significant undercount of total deaths directly and indirectly attributed to COVID-19.

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