

## A Review on Covid-19

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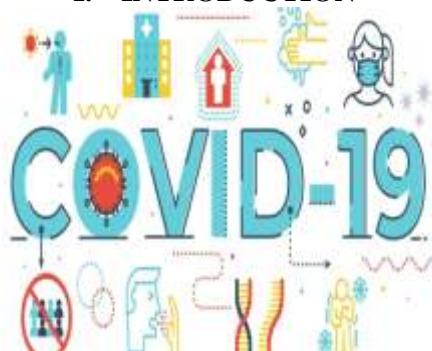
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### ABSTRACT

COVID-19 is a type of corona virus disease belonging to the family coronaviridae. The disease is thought to originate from bats and was spread to people through an unknown medium in Wuhan, China. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020 the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009. Now, there are thousands of infections and deaths that have been caused by the disease. We will cover the basics about the epidemiology, etiology, virology, diagnosis, treatment and prevention of the disease.

### I. INTRODUCTION



COVID-19 is an infectious disease caused by a newly discovered coronavirus called SARS-CoV-2. WHO first learned of this new virus on 31 December 2019. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes chronic respiratory disease and cancer are more likely to develop serious illness. The best way to prevent and slow down transmission is to be well informed about the

COVID-19 virus, the disease it cause and how it spreads. Protect yourself and others from infections by washing your hands or using an alcohol based rub frequently and not touching your face.

### SYMPTOMS

Signs and symptoms of coronavirus disease 2019(COVID-19) may appear two to 14 days after exposure. This time after exposure and before having symptoms is called the incubation period. Common signs and symptoms can include:

- Fever
- Cough
- Tiredness
- Fatigue

Other symptoms that are less common and may affect some patients include :

- Loss of taste or smell
- Nasal congestion
- Conjunctivitis (also known as red eye)
- Sore throat
- Headache
- Muscle or joint pain
- Different type of skin rash
- Nausea or vomiting
- Diarrhea
- Chills or dizziness.

Symptoms of severe COVID-19 disease include:-

- Shortness of breath
- Loss of appetite
- Confusion
- Persistent pain or pressure in the chest
- Higher temperature

Other less common symptoms:

- Irritability
- Confusion
- Reduced consciousness(sometimes associated with seizures)
- Anxiety
- Depression

- Sleep disorder
- More severe and rare neurological complications such as stokes,delirium and never damage.

### HIGH-RISK POPULATIONS

- The virus that causes covid-19 infects people of all ages. The evidence to data suggests that three groups of people are at a higher risk of getting severe covid-19 disease.
- Older people (people over 70 years of age).
- People with serious chronic illnesses such as:
  - ▶ Diabetes
  - ▶ Cardiovascular disease
  - ▶ Chronic respiratory disease
  - ▶ Cancer
  - ▶ Hypertension
  - ▶ Chronic liver disease
- People who are physically inactive.

### PREVENTION

To prevent infection and to slow transmission of COVID-19, do the following :

- Wash your hands regularly with soap and water , or clean them with alcohol based hand rub .
- Maintain at list 2 meter distance between you and people coughing or sneezing .
- Avoid touching your face, nose ,eyes.
- Cover your mouth or nose when coughing or sneezing.
- Stay home if you feel unwell.
- Practice physical distancing by avoiding unnecessary,travel and staying away from large groups of people.
- If you have a cough and difficulty breathing , seek medical attention.

### TREATMENT

#### Coronavirus Treatmnt in a Hospital

You don't need to go to the hospital if you have basic COVID-19 symptoms, like a mild fever or cough. If you do, many hospitals will send you home.If your case is severe, members of the medical staff will check for signs that the illness is causing more serious problems.

- Check the level of oxygen in your blood with a clip-on finger monitor.
- Give you a COVID-19 test. This involves putting a 6-inch cotton swab up both sides of your nose for about 15 seconds.
- Give you a chest X-ray or CTscan.
- You may get extra oxygen through two small tubes that go just inside your nostrils. In very

serious cases, doctors will connect you to a machine that can breathe for you , called a ventilator.

- You may also get fluids through a tube, or IV ,in your arm to keep you from getting dehydrated. Doctors will also closely monitor your breathing. The goal is for your infection to run its course and for your lungs to heal enough that they can breathe on their own again.

#### Diagnostic Testing In COVID-19

- Molecular Testing
- Serology Testing
- Other Laboratory Assessment
- Imaging Modalities
- Chest Computed Tomography
- Lung Ultrasound

#### Allopathic Medicine Used For COVID-19

- Hydroxychloroquine (Antimalarial Drug)
- Favipiravir (Antiviral Drug)
- Remdesivir (Antiviral Drug)
- Tocilizumab
- Itolizumab
- Dexamethasone (Steroids)
- Methylprednisolone
- Heparin
- Azithromycin (Antibiotic)
- Ivermectin (Antibiotic)
- Enoxaparin
- Amphotericin
- Apixaban

#### Ayurvedic Treatment For COVID-19

- Follow physical distancing , respiratory and hand hygiene ,wear mask.
- Gargle with warm water added with a pinch of turmeric and salt . Water boiled with Triphala (dried fruits of Emblica officinalis ,Terminalia chebula ,Terminalia bellerica ) or yashtimadhu (Glycyrrhiza glabra )also can be used for gargling .
- Nasal instillation/ application of medicated oil ( Anu Taila or Shadbindu Taila) or plain oil (Sesame or Coconut ) or nasal application of cow's ghee (Goghrita) once or twice in a day , especially before going out and after coming back to home.
- Steam inhalation with Ajwain (Trachyspermum ammi ) or Pudina (Mentha spicata ) or Eucalyptus oil once a day .
- Adequate sleep of 6 to 8 hrs.
- Moderate physical exercises.

- Use warm water or boiled with herbs like ginger , coriander ,basil or cumin seeds etc , for drinking purpose .
  - Fresh , warm , balanced diet .
- Drink golden milk (half teaspoon haldi powder in 150ml hot milk ) once at night .

#### MEDICINE-

- Ayush-64
- Ayush Kwatha
- Sanshamanivati
- Fifarol Tablet
- Laxmivilasarasa

#### Homeopathic Medicine For COVID-19

##### ❖ Arsenicum Album 30C

##### Uses of Arsenicum Album 30C –

- Helps in treating respiratory ailments such as cough , wheezing ,and breathing difficulties.
- Useful in treating fever and weakness caused due to infections .
- Provides relief from acidity and indigestion.
- Relieves anxiety and stress related to recurrent health problems .
- Used as a prophylactic (Preventive) medicine against coronavirus infections .

##### Self Treatment For COVID-19

- Isolated your self in a well ventilated room .
- Use a triple layer medical mask , discard mask after 8 hrs of use or earlier if they become wet or visibly soiled .In the event of a caregiver entering the room , both caregiver and patient may consider using N 95 mask .
- Mask should be discarded only after disinfecting it with 1% Sodium Hypochlorite .
- Take rest and drink a lot of fluids to maintain adequate hydration .
- Don't share personal items with other people in the household.
- Monitor temperature daily.

##### COVID-19 Vaccines Name –

- ❖ Covaxin Vaccine
- ❖ Covishield Vaccine
- ❖ Sputnik V Vaccine

#### ★ COVAXIN-



Covaxin is an inactivated virus based COVID-19 vaccine developed by Bharat Biotech in council of Medical Research .This vaccine is developed with whole-virion inactivated vero cell-derived technology. They contain inactivated viruses , which can not infect a person but still can teach the immune system to prepare a defence mechanism against the active virus .

- It administered as 0.5ml in the upper arm region .
- The second dose of covaxin is scheduled after 4-6 weeks after the first dose.
- Covaxin can be stored at 2-7°centigrade , which is a household refrigerator temperature .The vaccines most suited for Indian condition as most of the vaccines here are kept at same temperature range .
- This also makes the transportation and storage easier .
- Covaxin are intramuscular vaccines .
- It can potentially prevent coronavirus infection in people aged above.
- Covaxin has begun its clinical train in children aged above 2 years of age .
- After getting vaccinated ,you may experience pain at the site of injection , some people may also experience side effects such as headache , joint pain and may feel feverish .These side effects do not persist for long and generally go within a day or two.

#### ★ COVISHIELD-



- Covishield has been developed by the Oxford-Astra Zeneca and is being manufactured by the Serum Institute of India (SII).
- It is administered as 0.5 ml in the upper arm region .
- The second dose of covishield is scheduled after 84 days or 12-16 weeks after the first dose .
- It can be stored at 2-8°C, which is household refrigerator temperature . This makes the vaccines most suited for Indian conditions as most of vaccines are kept at the same temperature range .
- It also makes the transportation and storage easier .
- The effectiveness of covishield vaccine is nearly 90% as per the global report .
- Covishield has been approved for people aged in years and above .
- Covishield is an intramuscular vaccine .
- After getting vaccinated , you may experience pain at the site of injection . Some people may also experience side effects such as headache , joint pain and may feel feverish . These side effects do not persist for long and generally go within a day or two.

★ **SPUTNIK V VACCINE-**



- Sputnik V is an adenovirus viral vector vaccine for COVID-19 developed by the Gamaleya Research Institute of Epidemiology and Microbiology .
- It is the world's first registered combination vector vaccine for the prevention of COVID-19 to be registered on 11 August 2020 by the Russian Ministry of Health .
- The 'V' in its name means 'Victory over COVID -19' .
- The vaccine can be stored at 2-8 degree Celsius.
- Sputnik V is an adenovirus viral vector vaccine , which carries viruses especially made containing the viruses especially made containing the coronavirus genes.
- People have to get two doses of Sputnik V , similar to covishield and covaxin. Both the doses have to be administered at least 21 days apart. These are inoculated through injection into the muscle.
- It is 91.6% effective.

**II. CONCLUSION:-**

The coronavirus disease continues to spread across the world following a trajectory that is difficult to predict the health , humanitarian and socioeconomic. But now this covid -19 disease can be treated by medicine and vaccines and by maintaining social distance wearing mask and by sanitizing hands.

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