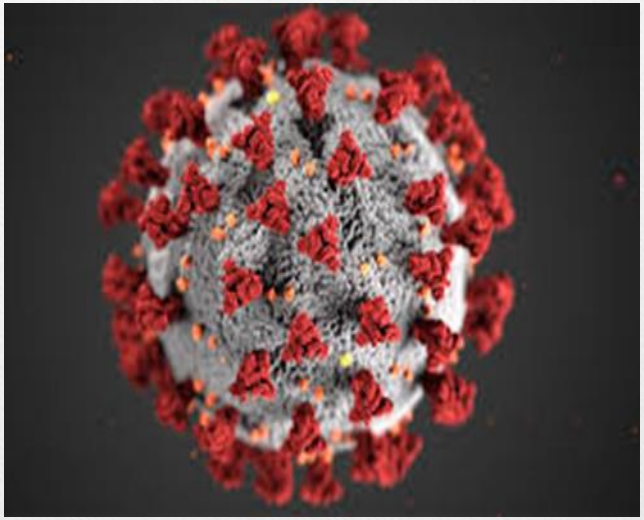
COVID-19

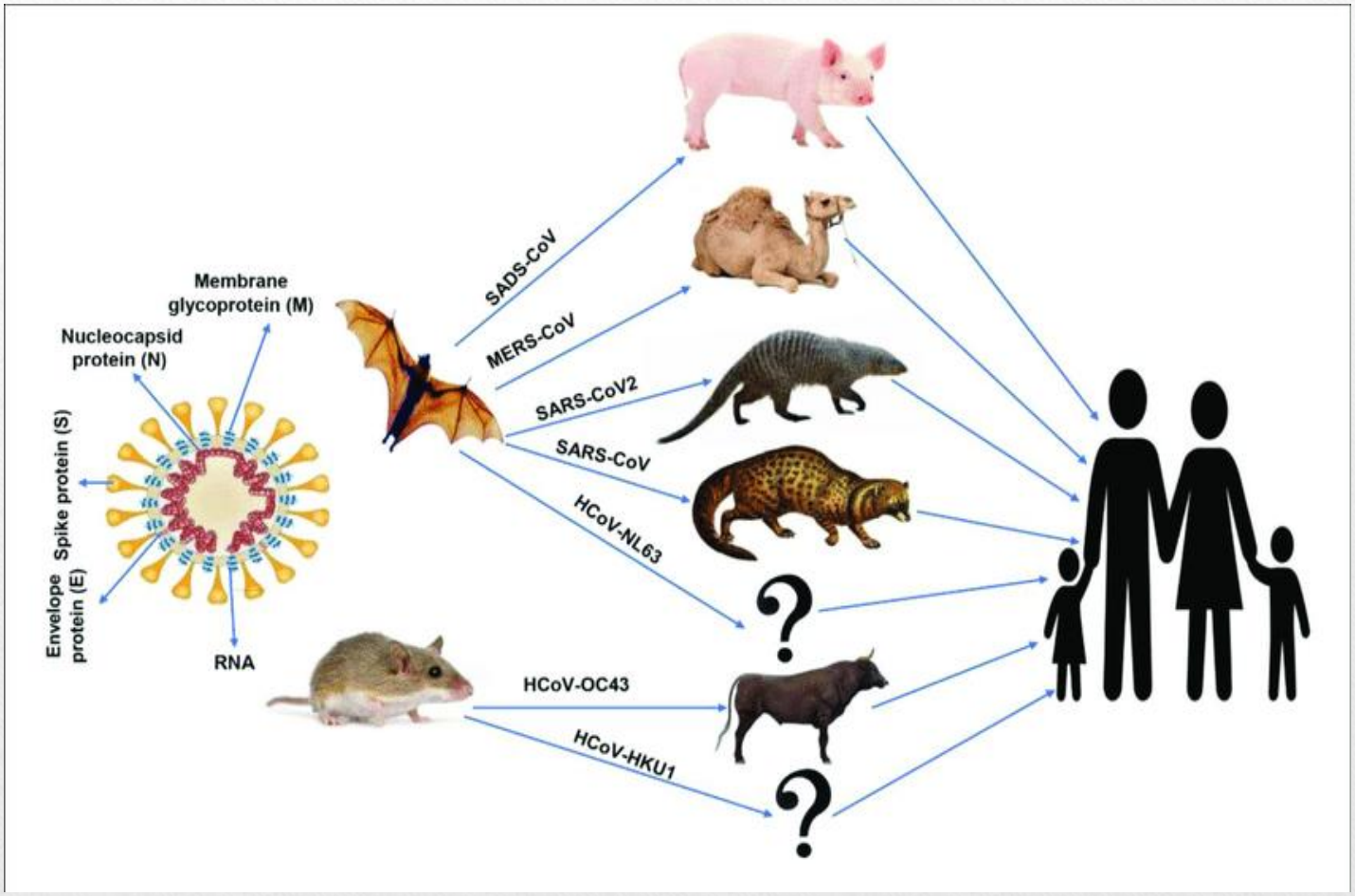


Introduction

- The word ‘CO’ stand for corona ‘VI’ for virus and ‘D’ for disease.
- The new strain of coronavirus , COVID-19 was first reported in Wuhan , China In December 2019.

Source of coronavirus

- Coronaviruses are often found in Bats , Cat and Camels.
- The viruses live in but do not infect the animals .
- Although researches do not know exactly how people were infected , but they already have evidence that the virus can spread directly from person to person through close contact


Membrane glycoprotein (M)
Nucleocapsid protein (N)
Spike protein (S)
Envelope protein (E)
RNA
SADS-CoV
MERS-CoV
SARS-CoV2
SARS-CoV
HCoV-NL63
HCoV-OC43
HCoV-HKU1
?
?

Spreading of COVID-19

- The viruses travels in respiratory droplets when an infected person cough, sneezes , talks , sings or breathes.
- The virus travels in small respiratory droplets that linger in the air for minutes to hours from an infected person.
- This method of spread is more likely to occur in enclosed spaces with poor ventilation.

Risk of getting COVID-19

- People who had close contact with a person who has a laboratory – confirmed or a suspected case of the COVID-19 virus.
- People over age 60 who have a weakened immune system or pre-existing medical, diabetes, obesity ,asthma , heart , liver and kidney disease .

Prevention Of COVID-19

Signs and symptoms COVID-19

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Tiredness
- Muscle or body aches
- Headaches
- Loss of taste or smell

Warming signs COVID-19

- Trouble breathing
- Persistent pain or pressure in the chest
- Confusion or disorientation
- Inability to across
- Bluish lips of face
- Low level of oxygen saturation (below 90%)
- High temperature (above 38%)

Diagnostic Tests for COVID-19

- Mainly two tests are used to detect COVID-19

1. The real time polymerase chain reaction (RT-PCR) test.
2. Rapid diagnostic tests based on antigen detection

The real time polymerase chain reaction (RT-PCR)

- Samples are collected from the nose and throat with a swab .
- Molecular tests detect the virus in the samples by amplifying viral genetic material to detectable levels.


PharmEasy

Rapid diagnostic tests based on antigen detection

- Rapid antigen test (sometimes known as a rapid diagnostic tests - RDT) detect viral proteins known as antigens .
- Samples are collected from the nose and throat with swab .

- These tests are cheaper than PCR and after results more quickly , although they are generally less accurate.

Management and treatment of COVID-19

- If the person is not hospitalised
  - No specific antiviral or immunotherapy is recommended.
  - In case of fever , drink plenty of fluids (water is best) get lots of rest ; take antipyretics like acetaminophen (Tylenol).

If the person is hospitalized

Iv Remdesivir with or without the oral (by mouth) corticosteroid dexamethasone is recommended.

- Chloroquine or hydroxychloroquine with or without azithromycin.
- Supplemental oxygen.
- Mechanical ventilation.
- Extracorporeal membrane oxygenation. The person continues to receive treatment while a machine pumps the blood outside his body. It takes over the function of body lungs and heart.

Vaccine for COVID-19

- India initially approved the Oxford , AstraZeneca vaccine vaccine manufactured under license by Serum Institute **Covishield** and **Covaxin** developed locally by Bharat Biotech .
- **Covaxin** is India's indigenous COVID-19 vaccine by Bharat Biotech is developed in collaboration with the India Council of Medical Research (ICMR) and the National Institute of Virology.


COVAXIN
BHARAT
BIOTECH

- **Covishield** is the vaccine developed by the Pune – based Serum Institute of India and was approved by the Expert Committee (SEC) of the Drug Controller General of India (DCGI).

Social Welfare Schemes for COVID-19 crises in India

- The India government has taken certain steps to control this widespread COVID-19 virus.
- Due to coronavirus outbreak and seeing the condition , the government has so far taken a calibrated approach to offer relief and welfare package for farmers workers in the unorganized sector and for the poor.

Reference

- R Sheewani
- Varindar kaur


THANK
YOU