

Demystify Corona

The awareness Program **Demystify corona** began with details of the previous attack. The Wuhan corona is named as “severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)” as the name of the new virus on 11 February 2020. This name was chosen because the virus is genetically related to the coronavirus responsible for the SARS outbreak of 2003. Coronaviruses (CoVs) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS- CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (n CoV) is a new strain that has not been previously identified in humans.

Coronaviruses are zoonotic :they are transmitted between animals and people.SARS-CoV was transmitted from civet cats to humans and MERS-CoV from dromedary camels to humans. Several known coronaviruses are circulating in animals that have not yet infected humans.

Coronaviruses are large, enveloped, positive-stranded RNA viruses. They have the largest genome among all RNA viruses. The genome is packed inside a helical capsid formed by the nucleocapsid protein and further surrounded by an envelope. Associated with the viral envelope are at least three structural proteins: the membrane protein and the envelope protein are involved in virus assembly, whereas the spike protein mediates virus entry into host cells. Among the structural proteins, the spike forms large protrusions from the virus surface, giving coronaviruses the appearance of having crowns (hence their name; coronain Latin means crown).In addition to mediating virus entry, the spike is a criticaldeterminant of viral host range and tissue tropism and a major inducer of host immune responses.

Coronaviruses usually affect mammals and birds, causing a variety of lethal diseases.Coronaviruses are capable of adapting to new environments through mutation and recombination with relative ease. As such, they can affect new hosts and tissues.

The 2019-nCoV is a novel strain of coronavirus that was first detected in the city of Wuhan, in the province of Hubei, in the People’s Republic of China. The outbreak started as a pneumonia of unknown causal agent at the end of December 2019.On 30 January 2020, the World Health Organization (WHO) declared the outbreak a Public Health Emergency of International Concern.On March 11 2020, WHO declares corona as pandemic.

The WHO recommended that the interim name of the disease causing the current outbreak should be 2019-nCoV acute respiratory disease. In the 2019-nCoV acronym, “2019” is the year the virus was first detected, “n” means “new”, and “CoV” corresponds to the coronavirus family.

However, there have been reports of spread from an asymptomatic infected patient to a close contact. (Centers for Disease Control and Prevention, 2020) (Rothe, 2020). The 2019-nCoV acute respiratory disease has an incubation period of 2 to 14 days before the onset of symptoms. If a person has been exposed to the virus but has not developed symptoms within 14 days, they can be considered as not infected. For confirmed 2019-nCoV infections, reported illnesses have ranged from people with little to no symptoms to people being severely ill and dying. All symptoms along with risk factors and complications were explained. Epidemiology and Therapeutic and triage strategies for 2019 novel coronavirus disease in fever clinics were discussed in the session. All WHO precautions at public and workplace levels were also explained to the members during the session.