

**Article****A PUNCTILIOUS RENDITION ON A GRIEVOUS DISEASE COVID-19**  
SHIVOM\*, SUBHAJIT CHAKRABORTY

NIMS Institute of Pharmacy, NIMS University, Jaipur

\*Corresponding author: Shivom; [shivom3012@gmail.com](mailto:shivom3012@gmail.com); +91-9872789969**ABSTRACT**

*The current threatening outbreak of the world which is caused due to SARS-CoV-2 is COVID-19, reports suggest that bats are the initial reservoir of this virus but intermediate source are not confirmed. Seafood market of Wuhan, Hubaei province are responsible for initiating the spread of this small crown shaped single stranded RNA virus which now infected around 12.7 million across the 213 countries, since it is satisfying stats that are recovered with the recovery rate of 24%. It is challenging for the world how they will secure global health in the time of pandemic. This Review includes complete stats of a novel corona virus which now become a global health emergency.*

**Key Words:** COVID-19, SARS-CoV, Symptomatic, Zoonotic, and WHO.

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**Introduction**

The most recent threat to whole world which is known as COVID-19 or novel coronavirus (2019-nCoV), which is a respiratory disease and related to the virus severe acute respiratory syndrome (SARS)<sup>1</sup>. 18 years ago SARS(2002-2003) is a preceding instance of emergence outbreak and at present COVID-19 outbreak created a public health emergency for the world which is emerged from seafood market of Wuhan, China.<sup>2</sup> According to the Center of Disease control and preventions,

China via many reports Zoonotic causes of the virus has been reported.<sup>1</sup> Today every country and every human being in the world want to get rid from the COVID-19 and trying it's best to do so. Till now about 7 million cases are confirmed of COVID-19 across the world and about 4 lakh people died. In which USA is at the top with approx. 1.9 million confirmed cases and approx. 95,000 death in the country and some countries like Italy, Spain, Russia, Iran, India are in drastic condition.<sup>3</sup>

### **Epidemiology**

In very last of the Dec,2019 Wuhan, Hubei province a populated business hub were reported few cases of pneumonia of a different etiology.<sup>2</sup> Rapid Increase In no. Of cases and Similarity between all the patients of connection to the Wuhan Seafood Market created an alarming emergency for Center of Disease Control and Preventions (CDC), China. On Dec 31,2019 the all over condition were reported to WHO and Seafood market has been closed.<sup>4</sup> Till Jan 22,2020 there were 1975 lab confirmed cases and 56 deaths were reported and according to the statement of WHO it is confirmed that the novel corona virus is 95% similar to beta-coronavirus originated from wild bats and also 70% similar to (SARS-CoV) but there is no proper evidence for person to person transmission of the virus. On Jan 30,2020 90 other confirmed cases were reported to WHO from other Countries.<sup>5</sup> Now it is confirmed that there is no doubt in ability of person to person transmission of the novel corona virus and WHO declared nCov-2019 as 6<sup>th</sup> time Public Health Emergency Of International Concern (PHEIC). After Rapid Increment in confirmed cases of novel corona virus the stats as of Mar 3,2020 is 90,870 in which 80,424 are from the origin China and left cases were confirmed from 70 other countries of the world. On Mar 11,2020 WHO declared COVID-19 as a Pandemic which is now a global health threat.<sup>6</sup>

### **Characteristics**

According to WHO incubation period of COVID-19 is 2-14 days. The main clinical symptoms include fever, cough, sore throat, headache, fatigue,

headache, myalgia and difficulty in breathing.<sup>1</sup> Virus in infants and children has been also reported to be constantly milder than adults and Old aged people.<sup>7</sup> All ages are equally susceptible to this virus. The virus is mainly transmitted via droplets from coughing and sneezing by symptomatic patients but can also occur from asymptomatic patients.<sup>8</sup> Its not easy to get rid of corona viruses in laboratory, which is another cause of the common cold. It's difficult to overcome the effect of the COVID-19 on national economies and public health. Because of no medication treatments include self-care. People may follow few steps, like :Resting and avoiding overwork, Drinking enough water, try not to smoke, Using acetaminophen, ibuprofen for pain & fever. A doctor can confirm the virus by taking a sample of respiratory fluids, such as mucus from the nose, or blood. The preventative measures includes regular hand washing, covering mouth and nose when coughing and sneezing.<sup>1</sup>

### **Management and challenges for pharmacist**

At the time of the Global Health Threat COVID-19, health workers are the Frontline Warriors of the disease. There is no lock down or any rest for the pharmacists across the world. The public are working and tackling the novel coronavirus in their countries to stop the spread of covid-19 but it is clear that public is so much dependent on the pharmacist to fulfill their Health Care needs i.e., medicinal needs, sanitary needs, hygienic needs and many more.<sup>6</sup> Pharmacist in the hospital also plays a vital role in pandemic and serving patient and support from medicinal needs to giving their queries to the pharmacist. Pharmacist had already

performed extraordinary roles in health crisis and early pandemics. Public has been globally accepted the frontline service of the pharmacist and also concern and scared about the danger of getting infected from the virus. As International pharmacist federation and American pharmacist Association has also issued guidelines for preparedness and strengthening of pharmacist community. It is time to encourage the pharmacist for their dedicating and uninterrupted service for the nation.<sup>6,9</sup>

### **Transmission**

Till date there is no proper evidence that seafood market of Wuhan is only responsible for spread of the corona virus. Many of the starting cases were linked to the zoonotic source of the virus but human to human transmission of the virus is occurred at earlier stage which transmitted the virus to all over the world.<sup>5</sup> It has been came into knowledge that novel corona virus also live on surfaces for some hours to many days caused the rapid increment in the no. of cases.<sup>6</sup>

### **Biology**

COVID-19 is representing seventh member of the coronavirus family that infected human beings. COVID-19 is Caused due to SARS-CoV-2 which is a member of the family Coronaviridae and order Nidovirales. SARS-CoV-2 belongs to Beta coronavirus with two known viruses, SARS-CoV and MERS-CoV. SARS-CoV-2 is an enveloped and positive-sense single-stranded RNA virus.<sup>8</sup> Crown like structure of this virus is responsible for its name-Corona. According to the reports Similarities of SARS-CoV-2 with beta-corona virus suggest that bats might be the original host of this

virus.<sup>8</sup> Structurally Corona Virus have five main parts:

1. Spike Glycoprotein
2. Hemagglutininesterase
3. Nucleoprotein
4. Genomic RNA
5. Envelope

A hand sketch of the novel corona virus can be seen in Fig. 1

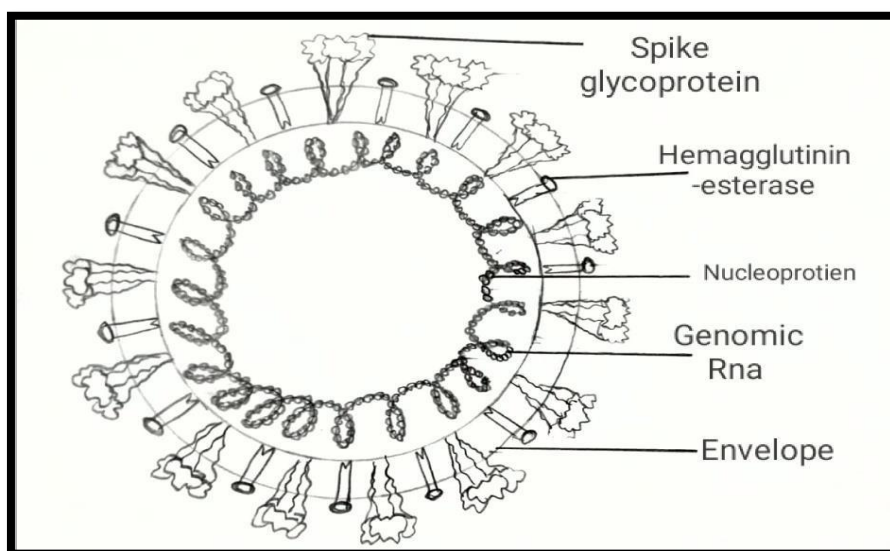
### **Treatment and Preventions**

Researchers and Developers of Medical science with Doctors, health workers and helpers are treating the patients of COVID-19 Day and Night but till now there is no proper vaccines treatment available for the novel corona virus.<sup>10</sup> Isolation of suspected cases at home is a preventative measure. The ventilation at home must have sunlight for destruction of virus. People must be asked to wear a simple surgical mask and practice good health hygiene.<sup>6</sup> Caretakers must be asked to wear a surgical mask when in the same room as patient and wash there hands in every 15-20 min. The greatest risk in COVID-19 is transmission to healthcare workers. In SARS 2002 emergency, 21% of those affected were healthcare workers.<sup>7</sup> Almost 1500 healthcare workers in China have been infected. Interferons (IFNs) are only partially effective against corona viruses. Combination of ribavirin with IFNs may have increased activity if compared to only IFNs is given against some coronaviruses however, the effectiveness of this combination is also used for further research for vaccines.<sup>8</sup>

### **Conclusion**

The current situation of the world is very serious since 213 Countries are infected with novel corona virus. Till the date of writing according to the WHO stats there are 12.7 million of Confirmed cases of the COVID-19 and 887,681 are died due to the novel corona virus.<sup>11</sup> It has been also seen that people with some diseases like diabetes,

tuberculosis, and heart diseases are more likely infected with novel corona virus.<sup>6,10</sup> Only Preventative measures are taken for improvement in the condition of the global health and it is very challenging for all the world to fight against the global threat COVID-19.<sup>4</sup>



**Fig. 1: A hand sketch of the novel coronavirus**

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**Conflict of Interest**

Authors declare that there is no conflict of interest.

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