Coronavirus is the Public Threat on Worldwide Level

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EDITORIAL NOTE

Novel coronavirus is also known COVID-19. It is an infectious and life threatening disease. Coronavirus spread on worldwide level and effect thousands of peoples. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) or Coronavirus originate from bat or intermediary animals in Wuhan it is the province of Hubei Chaina in December 2019. According to (WHO) World health Organization 45171 case report and 1115 deaths in 12/2/2020 due to coronavirus. The cases of coronavirus disease 96000 and 3300 deaths report to date 5/3/2020. This disease pass one person to another by inhalation and close contact with infected peoples. And it's incubation range is 2-14 d. The symptoms of coronavirus like influenza or common cold. Coronavirus is closely related or similar to Middle East Respiratory syndrome Coronavirus (MERS CoV) when compared both sequence identity. Only the S protein region is different of COVID-19 from other coronaviruses. The 90% amino acid sequence of N protein of COVID-19 is similar to the SARS-COV. Treatment, vaccines or any therapeutic drugs are not available yet. But their is strictly focused on prevention and treatment of COVID-19. Hance this review will focus on coronavirus, structure of coronavirus, mode of transmission, Mechanism, diagnosis and its treatment. Coronavirus belong to Coronaviridae and subfamily Orthocoronavirinae and order Nidovirales. In the subfamily of Orthocoronavirinae four(4)genera are present these are alphacoronavirus, betacoronavirus, gammacoronavirus and delta coronavirus. It is an envelope and single strand positive RNA virus and its range 40-60nm. . And size fall between 26 to 32 kb. Four coronaviruses circulations in humans which cause mild disease the names HKU1, NL63, 229E and OC43. Alpha CoVs and beta CoVsare both known infect mammals and delta CoVs and gamma CoVs both are known infect birds. Two viral pneumonia outbreaks severe acute respiratory syndrome (SARS) caused by the beta CoVs and Middle East Respiratory syndrome (MERS) are also cause by betacoronavirus (beta CoVs).The outbreak of SARS first reported in Chaina in 2001. It spread on worldwide level affected 8422 peoples and cause 916 deaths in Hong Kong in China, the mortality rate is 11%. Than in Saudi Arabia MERS emerged with camels in 2012 and it spread to other countries. It affected 2494 peoples and 858 deaths. Its mortality rate was 34-37%. Viruses originate in both pandemics from bat and than infected humans or peoples through other intermediate animals hosts. Both SARs-CoV and MERS CoV emerged and origenate newly SARS-CoV-2. And it is belong to B lineage of betacoronavirus (beta-CoVs). COVID-19 has spread more rapidly in more than 72 countries. COVID-19 causes >90,000 confirm cases and 2946 deaths in 3 March 2020. No treatment or any vaccine and therapeutic drugs is not synthesize against SARS-CoV-2. In this review Article we discussed or summarize progress of SARS-CoV-2 its structure, prevention and treatment.

Keywords: COVID-19, SARS-CoV-2, Coronavirus, pneumonia, zoonotic