

## Overview of Covid-19 and way forward

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### Abstract

Covid-19 is known to cause diseases and several infections in human. They endanger global health, economy and social security of mankind. They are responsible for respiratory and gastro enteric disorder. As a group, they are not limited to a localized region in organs; targeted tissue includes nervous system, immune system, reproductive system, digestive system and in severe or critical stage, they migrate to systemic infections resulting to death in human. The new novel strain of Corona virus was reported after an outbreak in Wuhan, China in 2019, which was named as COVID-19, abbreviated as COVID-19. In COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease.

#### What are Corona Viruses?

Taxonomically, Coronaviruses (CoVs) is the largest group of viruses belonging to the order Nidovirales and the family Coronaviridae. The family Coronaviridae comprise of two sub families namely the Coronavirinae and Torovirinae. The coronavirinae are further subdivided into four genera, the Alpha, Beta, Gamma and Delta corona viruses. Covid-19 are enveloped, non-segmented, positive-sense and single-stranded RNA viruses. They are characterized by club-like spike that project from their surface, a large RNA genome, and unique replication strategy. It is named after the wreath-shaped protrusions on the envelope of the virus. This group of virus is of zoonotic origin.

#### Emergence and Conspiracy Theories of SARS- CoV-2 (COVID-19)

In November 2002, the novel strain of corona virus was reported in China after it was mistakenly referred to as a new influenza virus recombinant. It was recognized as the etiology of ("atypical pneumonia") manifested by respiratory disorder symptoms, sore throat, dry cough, fatigue, dyspnea, pneumonia, fever and headache. It was later named Severe Acute Respiratory Syndrome (SARS). The index case of SARS was first reported in Foshan city, Guangdong Province, China, where three people became severely ill and over five fatalities were recorded. In February, 2003, the world was aware of the lung disease, shortly before it escaped China, when one of the doctors who had been treating patients had a travelling history to Hong Kong became severely ill, died and transmitted it to other 29 countries. World Health Organization reported

that the confirmed cases of the infection were 8096 in July, 2003. There were 373 possible SARS cases in the United State: however, SARS-CoV identification has been confirmed in only 8 of them. Seven of the eight cases confirmed were likely due to exposure during international travel, and the eighth case was probably due to exposure to person to person transmission. In 2004, the second outbreaks were recorded with only 4 infections and with no fatality or further transmission. The genome sequence of SARS-CoV strain provides an explanation for the sudden apparent disappearance of the disease for a while. The World Health Organization (WHO) reported that the novel corona virus affected the lower respiratory tract of patient with pneumonia in Wuhan, China on 29 December 2019. As the phrase goes, the 'streets are talking' and rumor mills are running overtime. Several skeptics and tin foil hat bearers have been speculating, some of the most spine-chilling, eerie and conspiracy theories include the claim that the corona virus is an offensive biological weapon with DNA-genetic engineering, however the claim is unsubstantiated. Claims that the virus is a partisan invention or part of a plot to re-engineer the population also lacks scientific basis. Scientist also refuted that the idea of a connection between Covid-19 and 5G is 'complete rubbish' and biologically impossible.

#### Epidemiological Characteristic of Pandemic Covid-19

On 29 December 2019, the initial symptom onset of COVID-19 confirmed patients was traced to the first four cases of an acute respiratory syndrome of unknown etiology which were reported in Wuhan City, Hubei Province, China among people linked to a local seafood market. Serious global concern of COVID 19 pandemic has create instability to human kind and its environment, this includes fear of confirmed case, stigmatization, increasing death rate, levels of stress, anxiety and psychological imbalance development among the quarantined and isolated people. Some previous research published COVID-19's epidemiological and clinical features focused mainly on Wuhan, China, but other regions were not mentioned. Clinical symptoms are similar but the epidemiology can differ from one region to another [22, 23, 29, 31, 36, 38, 39].

#### Summary:

Covid-19 pandemic is currently ravaging the world, its consequences have brought undue pressure to the economy, humanity and its environments. The World Health

Organization have declared it as a global health concern, hence the need for holistic approach to curtail it admits the wait for the development of therapeutic vaccine and drugs. The objective of this review is to summarize the current research and knowledge on viral origin, conspiracy theories, transmission, pathogenesis, clinical manifestation of the virus and to provide guidance on the importance of strict compliance to personal preventive hygienic measures in other to reduce the transmission risks. Nations of the world and concerned international organization should encourage and fund researches to prevent emergence or re-emergence of another pandemic in the future.

Keywords: Covid-19, pandemic, origin, transmission, personal preventive measures.