Corona Virus: Is a New Worldwide Enemy or an Underestimate Villain?

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Abstract

In the last month, there is a virus that are attacking all the world and causing thousands of dead. The CoV-19 name that was adopted by the specialists is a new conformational design that the “old corona virus” that appear in 1960 the first time. Nowadays it’s a World Health Problem with Public involvement because we had all the continents affect by the virus, and everywhere we have at least 5 cases with 1 case confirmed of corona virus. The new life and work travellers are scared the situation and sometimes they are the host of the virus and carry the disease to another place. There are cities in Europe and another continents that are totally closed, without schools, the commerce and companies are closed and the politicians are calling to the people stay at home. The import thing to remember is if the CoV-19 is a virus of flu and pneumonia that are spread by the air and though droplets (like spit and mucus), and if you are going to a risk area the use of a mask (special to prevent the inhalation of the infected air), use of ethanol to clean the hands, avoid to put the hands in a common space like bus, stairs, need to be cleaned immediately after finished. The symptoms of corona infection are: The symptoms may appear 2 - 14 days after exposure, as fever, cough, shortness of breath.

Keywords: Corona Virus; Worldwide Enemy; Villain

Nowadays we are living scared about a “new” conformational virus that are haunting us with a huge number of infected people in Korea and spreading worldwide. This virus has been responsible for causing significant human mortality, endangered the public health governments, doctors, hospital and the population in general.

The modern lifestyle, with a huge use of international travels to work with humans and goods, an epidemic of some disease is easier anywhere in the world and the risks are increased. Two novel virus were responsible for severe injuries nowadays, Middle East Respiratory Syndrome - Corona Virus (MERS-CoV) and severe acute respiratory syndrome corona virus (SARS-CoV) [1,2].

These viruses are causing damage with acute diseases and frequently illness. Corona virus is responsible to high mortality rate (30 - 90%), they have dual effect: the public are scared to be contract among public from one or more of them as well as the high pression on the healthcare professionals including all the team of doctors, nurseries, physiotherapist, and others. The cycle of the viruses is starts usually with animal, including bats, camels or chimpanzees. Besides that animal to human, human to human transmission has been reported, usually from an infected patient to a member of the hospital team care to other patient in the hospital, or members of the same work, as office, school, public service attendance [3].

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In December 2019, in Wuhan (China), individuals who visited a seafood market started to show some respiratory symptoms and the Chinese Health Authorities investigated a cluster of atypical one ‘disease’ cases occurring. Patients reported fever and cough, and most developed chest discomfort or respiratory distress, with a diagnosis of pneumonia being made by chest radiographs and computed tomographic (CT) scan, these people were infected with a virus, called Coronavirus (2019-nCoV) [4].

The first Corona virus appeared and was identified in 1960. In one study realised at Canada in 2001, more than 500 patients had symptoms as flu-like. Analyses of the DNA of virus showed that 3.6% of these cases were positive for the HCoV-NL63 strain by polymerase chain reaction (PCR). The health governments and health team at the hospitals, didn’t had an interpretation that corona virus was not a relatively simple virus, nonfatal virus, however; an outbreak epidemic in 2002 - 2003 in Guangdong province in China, resulted in the spread of the virus to many other countries, including Thailand, Vietnam, Taiwan, Hong Kong, Singapore and the United States of America, causing Acute Respiratory Distress Syndrome (ARDS) and high mortality in over 1000 patients. After this outbreak epidemic, microbiologists and infectious diseases experts focused on understanding the pathogenesis of the disease and discovered that this infection was caused by a new form of corona virus, resulting in 774 deaths, thus in 2004, the Centre for Disease Control and Prevention (CDC) and World Health Organization (WHO) declared a state of emergency (Centers for Disease Control and Prevention (CDC), 2003; Update: Outbreak of severe acute respiratory syndrome-worldwide, 2003. World Health Organization). In Hong Kong a case was really remarkable when 50 patients with ARDS, with more than 60% positive for corona virus [5].

Coronaviruses are enveloped, positive-sense, single stranded RNA viruses that are distributed broadly among humans, other mammals, and birds, which cause respiratory, hepatic, enteric, and neurologic diseases. known since the mid-1960s. Most people become infected with the coronavirus common throughout life. They are a common cause of respiratory infections mild to moderate short-lived. Among the coronavirus also found the virus that causes severe form of atypical pneumonia known as SARS. Six coronavirus species are known to cause human disease. Four viruses including hCoV-229E, OC43, NL63, and HKU1 are prevalent and typically cause mild respiratory diseases [4].

In Saudi Arabia infection, especially Jeddah, were reported on June 13, 2012; after this outbreak epidemic, corona virus spread to another countries in Asia, Africa, Europe and America (Zaki AM., et al. 2012). These Middle East countries and Gulf Region as well as (Saudi Arabia, Qatar, United Arab. Emirates, Oman, Bahrain, Palestine and Egypt) there is a high chance for corona virus infection according to the European Centre for Disease Prevention and Control (ECDC). Consequently, everyone arriving from one of these countries should be screened at the airport before entering, particularly after the huge number of infection reported in European countries, including France and United Kingdom (Buchhold., et al. 2013; European Centre for Disease Prevention and Control ECDC. 2012).

The latent period of MERS-CoV now we know to be between 2 to 14 days (median 5.4 days). To the admission of patient, it still takes 4 days and the period that people die from the disease takes 11.5 day. In the first stage, flu like symptoms such as fever coughing, chilling, myalgia and arthralgia are observed. After this respiratory difficulty is added. This quickly progresses to pneumonia (Haagmans BL., et al. 2014). We need to be more efficient to diagnostic and to beginning the treatment because is not acceptable 7 days to patient dye.

The corona virus responsible for this outbreak was a novel virus that mainly affected adults. The potential treatment strategies were still unclear. Although the new virus initially appeared to affect only adults, we have observed pediatric patients, therefore this virus represented a substantial public health risk (Haagmans BL., et al. 2014). In 2019-nCoV complications can get worse develop acute respiratory distress syndrome (ARDS), followed by septic shock, coagulation dysfunction and refractory metabolic acidosis, if the disease could not be controlled. Relevantly, some patients were afebrile or biologically confirmed for having an asymptomatic infection. These mysterious cases of pneumonia can serve as a possible source to spread the outbreak crises and contribute to a ‘biologic catastrophe’. Additional studies on the epidemiological significance of these asymptomatic cases are necessary. However, the disease can be avoided with good hand hygiene and primary health prevention measures such as the use of masks and mouth protection when sneezing or to cough (Li N., et al. 2019).
Eligibility criteria: Study design

Inclusion criteria
1. Articles discussed the corona virus history and epidemiology.
2. Case reports or studies involving patients who were exposed to corona virus.
3. All age group.
4. Article published within 4 years.

Exclusion criteria
1. Suspected case with no proves.

Transmission of the SARS-CoV
ARS is believed to be transmitted through respiratory aerosols, which were released while an ARDS patients coughs or sneezes. Viral infection will spread from the infected patient propelled in surroundings via air and will infect the nearby people who touch nearby several places that the virus could have access like mouth, nose or eyes. (Centers for Disease Control and Prevention, 2014).

Sign and symptoms
Incubation period of the SARS-CoV is about from 2 to 10 days.

The sign and symptoms include:
- High fever,
- Migraine,
- Body pains,
- Slight respiratory problem,
- Diarrhoea (10 - 20%) and
- Cough (after 2 - 7 days).

Complications
Many patients will develop pneumonia. Acute Respiratory Distress Syndrome will increase, and patients requires mechanical ventilation. ARDS will become lethal in few cases, frequently due to respiratory failure. Persons olden than 60 years old, particularly those who have complications such diabetes or hepatitis - are at greater risk of severe complications (Koren., et al. 2003.; Muller., et al. 2012).

Diagnosis of SARS-Co-V

PCR testing
The anti SARS-CoV antibodies are not found in populations that have not been exposed to the virus.

Researches are working to develop Antibody to test ELISA, Immunofluorescent antibody qRT-PCR tests are being developed by research laboratories and trying to discover the DNA sequence of the virus [6].

The Scientists hope to describe the novel conformation of corona virus as soon as possible and develop a medicine or vaccination against these novel and strong virus, and we ask to the population help us with precautions methods, washing hands, using masks, if there are some symptoms go ASAP to check if these symptoms are corona virus or if are a strong flu, use masks and avoid places with an accumulation of people [7-15].

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Conclusion

The barriers of the world are more and more closed with the new lifestyle and the spread of diseases are more and more easy than affect the worldwide. The CoV-19 is a new conformational of a virus that are existent since 1960 but the cares about cleaning and disinfection, and the use uncontrolled of medication could be one of the possibilities to spread quicker the disease. More investment and respect with the studies that the researchers done are needed to avoid crises as CoV-19 and is more intelligent expend money with the prevention of disease than with a large screening of experiments using the last generation of genomic and genetic and buying the ultra-expensive medications to try save the life of affected patients in the bed of dead.

Bibliography


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