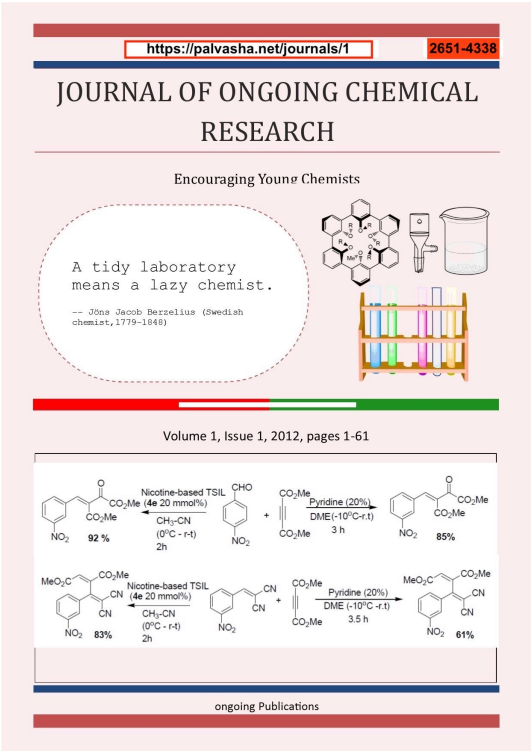
SYMPTOMS, TRANSMISSION, PATHOGENESIS, AND FUTURE WAYS TO CONTROL THE SPREAD OF CORONAVIRUS COVID-19



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Review

Symptoms, Transmission, Pathogenesis, and Future Ways to Control the Spread of Coronavirus COVID-19

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Abstract

The infection of coronavirus (COVID-19) is caused by SARS-COV2 that is a connective agent of a hypothetically lethal ailment. It is based on the huge number of infested personages presented to the marine animal market in Wuhan City, China. There is a speculation that this may be the zoonotic origin of COVID-19. Greater efforts have been made to reduce the spread of COVID-19 from person to person to control current practice. Particular care and efforts to prevent transmission of infection should be used in common settings including children, health care providers, and interested persons. In this review, we present the symptoms, transmission, pathogenesis, and future ways to control the spread of this deadly disease.

Keywords: Coronavirus, Review, Wuhan, Covid-19, SARS-COV2

LETRATURE REVIEW

In late December 2019, the capital of Hubei Province Wuhan city in China, became the epicenter of pneumonia for an unknown reason. Chinese scientists isolated a novel coronavirus on 7th Jan 2020 named SARS-CoV-2, formerly known as 2019-nCoV. The sample was taken from the infected patient from that virus [1]. In February 2020, WHO named the coronavirus disease as COVID-19 [2]. Although it is possible that the outbreak began with a large seafood market related zoonotic transmission event which was also traded in live animals, soon it's investigated that it can easily transfer from one person to another [3]. The world Health Organization has professed the six public well-being substitute of apprehension internationally SARS CoVI 2 is thoroughly related to the corona virus family a SARS. This virus is transmitted from one person to another person through drops or direct content and the infection period is estimated from 4 to 6 days [4]. By the regular acknowledgement of Co VID – 19 sample proficient agreement, strategies and standards were recognized to protect evolution and enable diagnosis and treatment [5-7]. Despite this health care providers according to the patients instructions in the center of disease control if there is a related error (N95) by WHO, get the right cloths disposable gloves and training sterility ways, because 16 health care specialists have been diseased by COVID – 19 [8]. According to a new study by the scientists from the New England journal of National Institute of Health, ULCA, Princeton University and CDC, the 2019 Corona virus has been up for several hours a day. Up to aerosol and is stable in surface medicine. This virus can persist up to 72 hours [9]. Symptoms usually begins form five to fourteen days. There is currently no explicit, active, verified, prominent pharmacological handling. Chloroquine shown in in vitro studies, an immunomodulatory drug conventionally used for the treatment of malaria which is active in plummeting viral imitation in other contaminations with coronavirus [10]. It is Suggested that the procedures to preclude septicity contain numerous social exclusion, hand-washing, (maintaining physical distance from each other's, especially those with symptoms), which cover this ailment. Cough in coughing and sneezing with elbows or clothes in place, while holding hands without washing face [11, 12]. There is no vaccine currently available or the antiviral which is used for the treatment of this disease and the therapy for COVID-19. The Organization contains indicative behavior, sympathetic care, segregation and investigational measures [13]. Intestinal viral particles consist of an RNA or DNA genome (i.e., a capsid) protected by a protein membrane. Intestinal viruses are resistant to heat, acids and oxides, so they live in the environment for a long time. Infected viruses, such as influenza virus, coronavirus, and Ebola virus, have an additional outer envelope containing lipids and proteins. Inverted viruses are not usually associated with the sewage route through humans and are inactive

in aquatic environments. Recently, viral metagenomes in sewage have identified human viruses including some infected viruses [14, 15]. After the increased size of the coronavirus genome was discovered after a field experiment, the Coronaviridae family now has four genera (International Tribunal for the Taxonomy of the Virus). While the organisms belonging to the genera Alpha coronavirus and Beta coronavirus are infectious to mammals, those in Gamma coronavirus and the newly described Delta coronavirus are a major source of animal matter [16, 17]. The most distinctive variants of the coronavirus variant are the parasites that infect the birds and birds, providing the rock in the wild for replication and transformation that can enable cross-species in other animals and humans [18]. In the season of human flu virus the virus is constantly circulating in the population around the world causing the season of the disease. The virus progresses slowly as it circulates through a substance called antigenic Drift. Diseases associated with seasonal influenza viruses often include respiratory symptoms and fever. Symptoms of cancer are rare, especially in children [19]

SYMPTOMS

Symptoms of COVID-19 infection are seen after infiltration within approximately 5 days. The period from the onset of CCID-19 symptoms to death from 6 to 40 days and 14 days. This period depends on the patient's age and immune system. It was shorter among patients 70-years-old compared with those younger than 70 years [20, 21]. The most common symptoms of early COVID-19 are fever, weakness and weakness, but other symptoms include infection, fever, hemoptysis, diarrhea, dyspnea and lymphopathy. The clinical manifestations of a chest CT scan showed pneumonia, however, with rare cases such as RNAaemia, increasing the risk of infection, diarrhea. Heart failure, and the danger of crystal opacities leads to it. It is important to note that there are similar symptoms between COVID-19 and primary beta coronaviruses such as fever, severity, dyspnea and bilateral opaque glass on the CT of the chest. [22, 23]. In some cases, the large-scale low-glass opacities were observed in sub pleural to both lung regions. This will be related and the response to mediation will be impaired. Unfortunately, some subjects treated with inhaled interferon did not show any clinical signs and appeared to be ill due to β-molar flexibility. In fact, COVID-19 showed a number of other clinical features including the introduction of the lower respiratory tract as seen by upper respiratory tract symptoms such as rhinorrhea, sneezing, and throat pain. The mortality rate among the 25-year-olds for COVID-19 incidents was 2.84% from Jan25, 2020 and the median age of death was seventy-five (range 48-9). Patients exposed to C0VIDD-19 showed intracellular leukocytes, infections, and increased pro-in-flammatory plasma cytokines. One of the CCID-19 cases showed weakness within 5 days of pain caused by cough, hypertension, and body temperature of 39.0 °C [24].

SPREADING CAUSE OF COVID- 19

There is some clues as to how the disease spreads are still described. According to WHO and the CDC say that it is especially true during social events and small batches are created when people cough (figure 1) or sneeze [25]. Seasonal fluctuations in human flu occur through droplets, air circulation, and transmission mechanisms; however, the relative importance of these three modes of transport remains unclear. In the case of seasonal tobacco transmission through contaminated water, viral RNA was detected in human stool samples [26, 27].

Figure 1. Most common way of spreading Coronavirus COVID-19

Drops may stop in the mouth or nose of people nearby or may be immersed in the lungs. Other medical treatments such as infiltration and cardiopulmonary resuscitation (CPR) can cause circulation and endothelial dysfunction. It can also spread when a person comes into contact with a contaminated area, known as a type of transmission, and then comes into contact with his or her eyes, nose or mouth. Personal injury occurs through direct contact or repair of debris that spreads to the phlegm or sputum from an infected person. In a small study that carried out women in their third trimester who had been diagnosed with teloronalone, there was no evidence that there was any mother-to-child transmission. However, all mothers who are pregnant now have contraceptives, so it is unclear whether birth control can occur during childbirth. This is important because pregnant women are more likely to be exposed to genital and genital

infections [28, 29]. Genomic analysis of COVID-19 revealed 88% of patients with two chronic respiratory distress syndrome (SARS) -like coronaviruses. It shows that the patterns between COVID-19 and humans can be related. There have been several reports that used human-to-human as a way of integrating COVID-19 patients. This is supported by domestic and non-family run small business in Wuhan [30]

In Upcoming automatous studies will need to inspect that the matric of each component can be affected, humidity, radiation components and temperature. In addition, further investigation has stopped the transmission of the disinfected layer between form and skin, and to see the effective hand washing and eye cleansing procedure, needed to identify agent-facing risk models. The virus is directly linked to drinking water wastewater and when it is thrown into a manure or tree. Common dirty water is often irrigation, drinking water and recreational, and although wastewater treatment reduces the infection, human infections are often found in wastewater, Shown in Fig 2. [31].

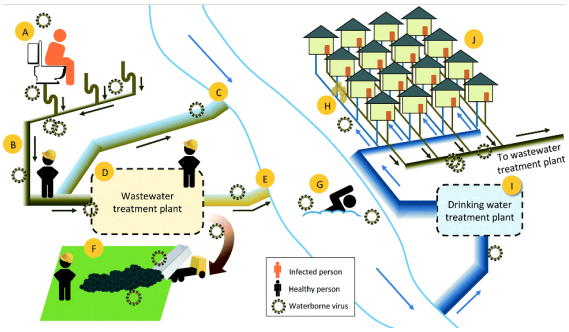

Figure 2. Getting infections from wastewater

The decline of non-infectious disease in urban water sources and public access areas. **A)** Viruses are excreted in the waste, urine, and vomit that penetrate the drainage drain. Toilets or problems with and without the inside of the plumbing system can create virus-filled aerosols that can cause exposure. **B).** the virus is transported through the local urban system to the wastewater treatment plant (WWTP). Employees who work for plantation systems can be exposed to the virus-free environment. **C).** the mixed flood water will lead to the release of a disinfectant in the untreated basin to the surface water. **D).** the Viruses that enter the downtown WWTP are expressed in physical, biological, and chemical treatment systems. WWTP agents can be exposed to the virus that is present in untreated and treated water, as well as the remaining bio solids. **E).** the Polluted water contaminants can carry viruses that have survived treatment to surface water. **F).** the residual bio solids from the WWTP are disposed of, usually via land-application. Employees or others exposed to bio solids may be exposed to virus-free solids that have survived therapeutic procedures. **G)** Recreational events can cause the release of non-contaminated microbes into the water system. **H).** Rapid sewage pipes can lead to contamination in the underground drinking water supply channels. **I)** to eat and drinking water to treat plants that may be contaminated. The water is treated with a number of natural and chemical treatment techniques to remove contaminants, including infection. **J).** Urban drinking water users are exposed to a virus that can conserve aggravation through drinking water treatment and supply or enter a distribution system through leaks in the underground pipes.

If a viral load was poured into manure, milk, or infected vomitus, it would enter the city's water system and be sent to the sewage treatment industry (WWTP). In 2014, Ebola outbreaks in the United States showed a lack of data on the quantity and quality of human waste and seawater pollutants [32]. RNA viruses, such as SARS and H5N1 influenza, were 85% of human immunodeficiency virus, mainly due to the high mutation rate of single-stranded RNA. Emerging or exposed human parasites often contain animal products - a phenomenon known as zoo noses - which can increase and expand the world-wide movement, forestry, factory farming, animal markets and meat hunting tor [33]. The high incidence of human infections is higher than typical catastrophic viruses; unwanted waste wastes and class bio solids, for example, have been used from the ear of some 80% of samples, and Rubella infection is less frequent [34]. In many cases, the presence of a respiratory tract infection in the lungs is thought to be from the patient swallowing the virus-enriched nose. Unfortunately, PCR methods often used to detect viruses in human samples do not return error information. In order to be sensitive to the urban environment, all the infectious germs, not the pieces of the virus, must be present in the wastewater. Indeed, infective SARS-CoV and avian influenza virus socks have been identified in fecal or intestinal tract samples of infected individuals [35 - 37].

PREVENTATION

Preventative measures to reduce the risk of infection include staying at home, avoiding crowded places, washing hands with soap and water often and for 20

minutes, practicing good hygiene and avoiding eye, nose, or mouth contact with unwashed hands. The CDC recommends covering the mouth and nose with epilepsy in case of illness or stroke and recommends using inside the stadium if no indication is available [38]. Local communities aim to close schools and employer centers, restrict travel, and reduce contact with large groups of affected people by stopping a mass meeting. The geographical area includes people who live as far as six (1.83 meters) distant [39]. Because the Sars-CoV-2 vaccine is not expected to be available until early 2021 [40]. An important part of resolving the COVID-19 epidemic is trying to alleviate the old problem, known as "flattery". Reducing viral load will help reduce the risk of overcrowded health workers, allow for better court treatment now, and delay further cases until treatment arrives. According to WHO, the use of masks is only recommended if the person is sick or slim or when caring for a person with a suspected infection [41, 42].

PHYLOGENETIC INVESTIGATION

Ten different types of COVID-19 patients were identified from a total of nine patients with 99.98% sequence identity [19]. Nucleotide derived from patients and the sequence of results showed the first finding of a beta- CoV strain. The sequence of COVID-19 was more than 80% specific to SARS-CoV and 50% to MERS-CoV [23]. Thus, evidence from clinical evidence of COVID-19 includes the beta-coronavirus gene, which includes SARS-CoV, which affects humans, cats and animals. COVID-19 is the seventh member of the human coronavirus that infects humans and is divided into the orthocoronavirinae subfamily. COVID-19 forms a lineage in the subgenus sar-becovirus [43]. It is based on the genetic sequence of identification and phylo-genetic data, COVID-19 is fully sequenced from SARS-CoV and it can and therefore can be considered as a new human bacterial infection. Of evidence supporting COVID-19 is a bat character in the presence of a high theology of the ACE2 receptor from a lack of mammals, thus documenting these potential or moderate COVID-19 mammals [30]. In addition, there are several other computers that are in development of COVID-19 infection. It is reported that the specific anti-expressed antiviral re-mdesivir and chloroquine are most effective in the control of 2019-nCoV infection in vitro. These antiviral computers have been used only for patients with secure track record. In fact, these therapeutic strategies can be tried to treat COVID-19 syndrome [44-50].

DISCUSSION

Symptoms cause respiratory and symptoms such as cough, fever, and in extreme cases, difficulty breathing. You can protect yourself by washing your hands often, avoiding eye contact, and avoiding close contact (1 meter or 3 mm) with unwanted people. Coronavirus infection is spread mainly through contact with an infected person when they are sick or slack. It is spread when a person touches a surface or an infected object on it, then touches their eyes, nose or mouth. People may become infected with the virus for 1 to 12 days before the onset of symptoms. The most common symptoms of Coronavirus (COVID-19) are fever, fatigue, and severe dryness. Most people (about 80%) recover from the disease without seeking medical attention. Along the steps, until more available treatments are available, it is reasonable to evaluate the multiple antivirals that provide treatment options for COVID-19 infections including Lopinavir / Ritonavir, Neur-aminidase inhibitors, peptide (EK1), RNA synthesis inhibitors. Evidently, more research is needed to quickly identify non-maieutic drugs to treat COVID-19 infection. In order to develop pre- and post-exposure prophylaxis against COVID-19, there is an urgent that is required to force animal models to replicate the worst disease seen in humans. Several groups of scientists are working hard to develop a human immunodeficiency virus to study CCID-19 virus to begin treatment of viral and experimental pathways in the study. In many cases, the condition can be serious and even fatal. Older people, and people with other medical conditions (such as asthma, diabetes, or heart disease), may be at increased risk of serious illness. People can meet coughing, fever, fatigue, Difficulty breathing (serious events). There is currently no effective vaccine for coronavirus infection (COVID-19). You can protect yourself and help to prevent to spread the virus to others or yourself. Wash your hands regularly for 20 seconds, with soap and water or alcohol-based hand rub, cover your nose with your mouth and tissues that can be discarded or tied to the handle while slipping, also stop meeting in public places.

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