

Corona Virus Disease-2019 Symptoms and Protective Strategies

COVID-19 Pandemisinin Hastalık Belirtileri ve Korunma Yolları

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ABSTRACT

COVID-19 is a worldwide pandemic that causes health and social crisis all around the world. Firstly, COVID-19 was determined in Wuhan City, Hubei Province in South China. The virus spread to all continents and affecting many countries.

On 30 January 2020, the World Health Organization declared the outbreak of COVID-19 to be a public health emergency of international concern.

In this review, the current symptoms, clinical characteristics, treatments and prevention of COVID-19 that in the world the disease has caused varying degrees of illness were summarized. The symptoms of COVID-19 patients usually have fever, cough, sore throat, breathlessness, fatigue, and malaise among others. The treatment of disease is general treatment by using antiviral drugs, vitamins, oxygen therapy. However, it is vital to determine suspected people as soon as possible and isolate them to prevent the potential transmission of infection to other patients and health care staff.

ÖZET

COVID-19 tüm dünyada sağlık ve sosyal krize neden olan dünya çapında bir salgındır. COVID-19, ilk olarak Hubei Eyaleti'nin Wuhan şehrinde Güney Çin'de tespit edildi. Virüs tüm kıtalara yayıldı ve birçok ülkeyi etkiledi.

30 Ocak 2020'de Dünya Sağlık Örgütü, COVID-19'un patlak vermesini uluslararası ciddi bir halk sağlığı acil durumu olduğunu ilan etti.

Bu makalede dünyada çeşitli derecelerde hastalıklara neden olan COVID-19'un mevcut semptomları, klinik özellikleri, tedavileri ve önlenmesi özetlenmiştir. COVID-19 hastalarının belirtileri genellikle ateş, öksürük, boğaz ağrısı, nefes darlığı, yorgunluk, ve halsizlik. Antiviral ilaçlar, vitaminler, oksijen tedavisi genel tedavi yöntemidir. Ancak, en kısa sürede şüpheli kişilerin belirlenmesi ve diğer hastalar ve sağlık personeline enfeksiyonun bulaşmasını önlemek ve onları izole etmek hayati önem taşımaktadır.

Keywords:

Coronavirus Disease-2019, Respiratory syndromes, Fever, Sore throat, Treatment

Anahtar Kelimeler:

Coronavirus Hastalığı-2019, Solunum sendromları, Ateş, Boğaz ağrısı, Tedavi

INTRODUCTION

The COVID-19 is the most prevalent pandemic in the worldwide. It affects the vast majority of humanity from fetus to adult in different cases means wild symptoms to death.

Coronaviruses are enveloped single-stranded RNA viruses that are zoonotic in nature and cause symptoms ranging from those similar to the common cold to more severe respiratory, enteric, hepatic, and neurological symptoms (1-4). Other than SARS-CoV-2, there are six known coronaviruses in humans: HCoV-229E, HCoV-OC43, SARS-CoV, HCoV-NL63, HCoV-HKU1, and MERS-CoV (5-7). Coronavirus has caused two large-scale pandemics in the last two decades: SARS and MERS (8-10). Coronaviruses are commonly cause disease in animals but very few cases have been known to affect humans. Since the 1960s, globally endemic human coronaviruses have been identified as frequent causes of respiratory infections such as the common cold and responsible for all 10-20% of respiratory tract infection in adults (11,12).

Seven coronaviruses can produce infection in people around the world but commonly people get infected with these four human coronaviruses: 229E, NL63, OC43, and HKU1. They usually cause a respiratory infection ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) and the most recently discovered COVID-19 causes infectious disease (13).

Time from exposure and symptom onset is generally between two and 14 days, with an average of five days. Common symptoms include fever, cough, sneezing and shortness of breath. Complications may include pneumonia, throat pain and acute respiratory distress syndrome (14). To detect the infection source of COVID-19, China CDC researchers collected 585 environmental samples from the Huanan Seafood Market in Wuhan, Hubei Province, China on 1 January and 12 January 2020. They detected 33 samples containing SARS-CoV-2 and indicated that it originated from wild animals

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sold in the market (15). Then, researchers used the lung fluid, blood, and throat swab samples of 15 patients to conduct laboratory tests. These laboratory tests found that the virus-specific nucleic acid sequences in the sample are different from those of known human coronavirus species. Laboratory results also indicated that SARSCoV-2 is similar to some of the beta (β) coronaviruses genera identified in bats, which is situated in a group of SARS/SARS-like CoV (16-19). Early infections were due to animal-to-person transmission. However, later cases were reported among medical staff and others with no history of exposure to that market or visiting Wuhan, which was taken as an indication of human-to-human transmission (15-23).

Mainly spread through close contact with infected people via respiratory droplets from cough or sneezing. Transmission and symptoms COVID-19 is spread due to close person-to-person contact via coughing or sneezing, similar to the transmission of influenza and other respiratory pathogens (24). People with cardio-pulmonary complaints, weakened immune systems, infants and older adults are more prone to COVID-19. Symptoms of COVID-19 include sneezing, cough, sore throat, fever, headache and feeling of being unwell, which may appear in a few as 2 days, or as long as 14 days, after exposure to the virus (25-29). Lower-respiratory tract ailments, such as pneumonia or bronchitis, may sometimes be caused by human coronaviruses. COVID-19 symptoms are often mild, with \approx 20% of infections progressing to severe diseases, such as pneumonia, respiratory failure and, in some cases, death (30).

Clinical manifestation and diagnosis: The complete clinical manifestation is not clear yet, as the reported symptoms range from mild to severe, with some cases even resulting in death (31). The most commonly reported symptoms are fever, cough, myalgia or fatigue, pneumonia, and complicated dyspnea, whereas less common reported symptoms include headache, diarrhea, hemoptysis, runny nose, and phlegm producing cough (31, 32).

For patients with suspected infection, the following procedures have been suggested for diagnosis: performing real-time fluorescence (RT-PCR) to detect the positive nucleic acid of SARS-CoV-2 in sputum, throat swabs, and secretions of the lower respiratory tract samples (32-34).

PREVENTIVE STRATEGIES

The diagnosis testing and understanding the cases of COVID-19 are critical in order to isolate the patients and prevent transmission between people. Coronavirus Disease-2019 tracking and diagnostic testing are critical and also critical to understanding epidemiology, informing case management, and to suppressing transmission. The Coronavirus disease outbreak is additionally typical to prevent virus community transmission, including how testing might be rationalized when lack of reagents/testing kit or testing capacity necessitates prioritization of certain populations group or individuals for testing.

To test for COVID-19, doctor or health practitioner may take samples, including a sample of saliva (sputum), a nasal swab and a throat swab, to send to a lab for testing or follow the directions of your local health authority (35). The best prevention is to avoid being exposed to the virus (36).

Infection preventive and control (IPC) measures that may reduce the risk of exposure include the following: use of face masks; covering coughs and sneezes with tissues that are then safely disposed of (or, if no tissues are available, use a flexed elbow to cover the cough or sneeze); regular hand washing with soap or disinfection with hand sanitizer containing at least 60% alcohol (if soap and water are not available); avoidance of contact with infected people and maintaining an appropriate distance as much as possible; and refraining from touching eyes, nose, and mouth with unwashed hands (37).

The WHO also issued detailed guidelines on the use: Take steps to protect yourself, wash your hands regularly and thoroughly with soap and water for at least 20 seconds or with an alcohol based hand rub (hand sanitizer that contains at least 60% alcohol) completely cover your hands and rub them together until they do not dry especially after you have been visited a public place, or after blowing your nose, sneezing or coughing, hands touch many surfaces and pick up viruses and these contaminated hands, can transfer the virus to your nose, eyes or mouth so, avoid touching these organs with unwashed hands. Because from there, the virus can enter the body and may cause persons to sick. Maintain social distancing (maintain at least 1 meter or 3 feet distance between yourself and anyone) and avoid close contact with people who are sick (who is coughing or sneezing). When infected individuals cough or sneezes, they spray small droplets from their nose or mouth which may contain COVID-19 virus (38,39).

Avoid large events and mass gatherings. Boost your immune system on top of basic illness prevention and real defense against disease is a strong immune system. People body is better able to fight off disease when the immune system is humming and people should put to get their perfect body shape. This is a time to focus on all the health habits people may have been putting off, Dr. Tom Moorcroft, an osteopathic doctor who specializes in infectious disease says, start daily activities and food choices that support people's health and turn them into habits that will lead to life-long improvements in health. During this critical situation, get adequate sleep and some fresh air and sunlight daily. People also, stay hydrated, minimize overly processed foods and make sure to eat enough micronutrients when they can try their best with what they can find at grocery stores right now (39).

The aim of the study is to inform people about the epidemiology, causes, prevention and control of the novel coronavirus, in addition to this the current ways to reduce transmission of COVID-19 among people.

In conclusion, the corona is the significant and costly diseases in the world recently. Thus, strategies to reduce the transmission of COVID-19 are vital. These strategies usually involve decreasing transmission and the number patients. Governors should take actions and advise public to avoid gathering and obey the measures. In order to prevent infection and to stop or reduce transmission of COVID-19, the following actions are necessary: Wash your hands regularly with soap and water, or clean them

with alcohol-based hand rub, maintain at least six feet distance between you and people coughing or sneezing, avoid touching your face, cover your mouth and nose when coughing or sneezing, stay home if you feel unwell, refrain from smoking and other activities that weaken the lungs, practice physical distancing by avoiding unnecessary travel and staying away from large groups of people. Therefore, people must be regularly advised and instructed.

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