

**CORONAVIRUS COVID-19 (SARS-COV-2 INFECTION) PROTECTION METHODS**

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ABSTRACT

In this review, it is ready to prevent new coronavirus outbreaks and access to information, which is a very important public health problem, to identify vital preventive practices and effective approaches to alert the public about non-scientific measures presented with information.

Avoiding using wrong information to prevent disease and to fight epidemic. Accordingly, it is necessary to obtain information from the Ministry of Health and health personnel. Disclosure should be avoided. Experts on the topic are the most accurate information that it is important to apply correct measures against the disease. It should be recalled.

Keywords: COVID-19, Coronavirus outbreak, prevention.

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1. INTRODUCTION

Coronaviruses (Covid-19) are common in the community, such as the common cold. Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS), It is a type of virus that causes serious problems (Rodrigo and et.al., 2016). SARS-CoV was previously the first international health emergency of the 21st century in 2003, previously emerged as an unknown virus, causing hundreds of people to die (Zhou and et.al., 2019). About 10 years later, from the Coronavirus family, previously in humans or animals. MERS-CoV, the existence of which has not been shown, is the first time in September 2012 in humans in Saudi Arabia defined; but then, in fact, the first cases in April 2012 in Jordan Zarqa. It turned out to be seen in the hospital (WHO, 2020).

On December 31, 2019, the World Health Organization (WHO) China Country Office, Wuhan, Hubei province of China reported cases of pneumonia of unknown etiology. Another factor on January 7, 2020. It was first described as a new Coronavirus (2019-nCoV) that has not been detected in humans. Later, the name of 2019-nCoV disease was accepted as COVID-19, the virus was transferred to SARS CoV. It is named as SARS-CoV-2 because of its close resemblance (Chan and et.al., 2003).

Coronaviruses are single-chain, positive-polar, enveloped RNA viruses. Positive polarity they do not contain RNA-dependent RNA polymerase enzymes because they encode the enzyme. They have rodlike extensions on their surfaces. These protrusions in Latin Based on the meaning of "corona", that is, "crown", these viruses are called Coronavirus (Figure 1).

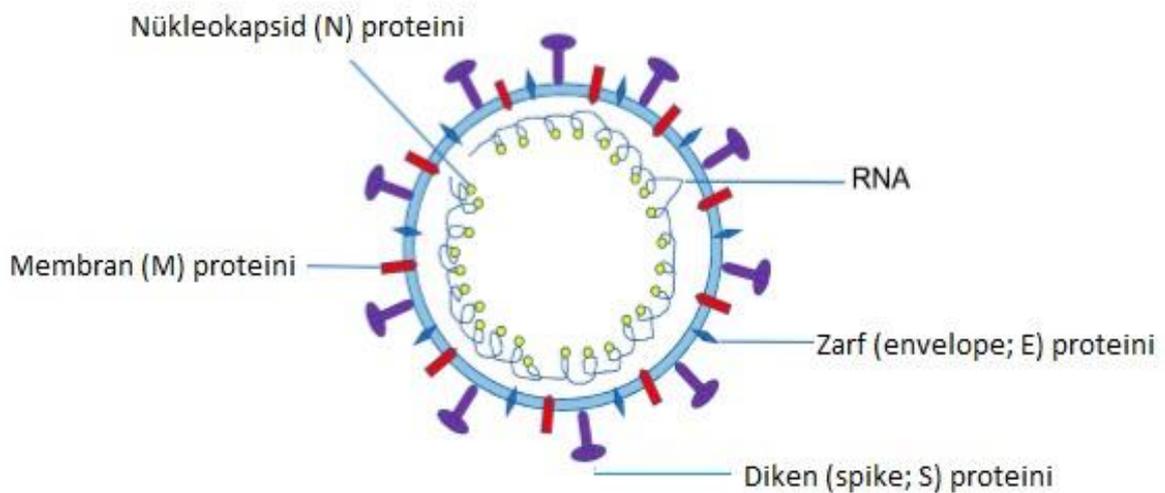


Figure1. Schematic structure of Coronavirus (Zhou et.al., 2019)

Disease spectrum caused by Coronavirus in humans is more acute than simple colds can vary up to respiratory syndrome. Various in humans and animals with respiratory, enteric, hepatic, nephrotic and neurological involvements can cause tables (WHO, 2020).

In this review, society is a very important public health problem; It is written for the purpose of defining coronavirus epidemic prevention and ways of protection.

2. EPIDEMIOLOGY

Pneumonia of unknown etiology on 31 December 2019 in Wuhan City, Hubei Province, China cases have been reported. Wuhan South China Seafood City Market, south of Wuhan (a whole sale fish and livestock market selling different animal species)

It is stated that in cases, fever, dyspnea and radiological bilateral lung pneumonic findings consistent with the infiltration were detected According to the COVID-19 report, death cases are generally advanced or associated systemic disease (hypertension, diabetes, cardiovascular disease, cancer, chronic lung diseases individuals with other immunosuppressive conditions (Young and et.al, 2020).

The first major case was reported on January 13, 2020, 61-year-old Chinese woman in Thailand. As the number of countries reporting imported cases increased steadily in the coming

days, February. At the end of the year, countries with domestic transmission started to emerge. As of the beginning of March 2020. While the pace of the epidemic slowed down in China, COVID-19 cases in Iran, the Republic of Korea (South Korea) and Italy and related deaths are increasing rapidly. The factor of the pneumonia cluster detected on December 31, 2019 is still on January 7, 2020 (Sağlık Bakanlığı, 2020).

It was first described as a new Coronavirus that has not been detected in humans. After this date the number of patients has increased rapidly, and illness has been observed in healthcare professionals. Disease from human spread rapidly due to its human contagion. The first COVID-19 case in our country was detected on March 11, 2020 (Backer and et.al., 2019).

3. SOURCE AND WAYS OF TRANSMISSION

It has not been clarified yet. The origin of COVID is still under investigation. Data available, Huanan Seafood Wholesale. It refers to wild animals sold illegally in the Sales Market. The disease is transmitted mainly through droplets. Also, coughing of sick individuals after contact with the hands of other people to the droplets that they emerge through sneezing. It is transmitted by bringing hands to the mouth, nose, or eye mucosa and touching it. Viruses can be detected in respiratory secretions of asymptomatic individuals, but the main transmission is from sick individuals (WHO, 2020).

When the epidemiological characteristics of the cases in China are examined, the average incubation period of 5-6 days. In some cases where it is 6 days (2-14 days), it has been observed that it may extend up to 14 days. The infectious time of COVID-19 is not exactly known. 1-2 from the symptomatic period it is thought that it started the day before and ended with the disappearance of the symptoms (WHO, 2019).

Coronaviruses are generally viruses that are not very resistant to the external environment. Ambient humidity and temperature, the amount of organic matter that it is expelled, the texture of the surface it contaminates (WHO, 2019). There is a life span depending on the factors.

Generally on inanimate surfaces. It is considered to lose its activity within a few hours. Activity on inanimate surfaces. While interpreting the duration, the duration of the contact is not only the continuity of the activity of the virus. It should also be remembered that it is important (Centers for Disease Control and Prevention, 2019).

4. PROTECTION METHODS

There is no vaccine yet developed against the virus. Most of prevention the important way is not to be exposed to the virus (Halk Sađlıđı Genel M¼d¼rl¼đ¼, 2020). According to available evidence, the COVID-19 (SARS-cov-2 Infection) virus is human. It is transmitted by droplet and contact. Effective methods of transmission routes hands are often washed with soap and water for at least 20 seconds (WHO, 2020). Hand wash hand very effective in killing viruses that are likely to exist (Centers for Disease Control and Prevention, 2020).

Especially in public areas washing hands is very important when found or in contact with other people. Water and use of hand disinfectants containing at least 60% alcohol in cases where soap is not available recommended (Uptodate patient Education, 2020). Hands can easily mediate the transport of the virus. Like face, eyes, mouth contact with organs can cause the virus to enter the body and develop the disease. Coughs, closing the mouth with a handkerchief while sneezing and throwing the handkerchief in the trash, in cases where there is no handkerchief It is necessary to close it with the inside of the elbow (WHO, 2020).

It is important to make them close and avoid close contacts in the society (Halk Sađlıđı Genel M¼d¼rl¼đ¼, 2020). Possible crowded areas should be avoided and should not be traveled unless necessary (Uptodate patient Education, 2020). One another effective measure is the regular cleaning and disinfection of frequently contacted surfaces. It is unsubstituted. In areas where contact is very frequent, such as tables, door handles, lighting buttons care should be taken to clean. Bleached water can be used for cleaning. If alcoholic solutions are used, it should be ensured that they contain at least 70% alcohol (Halk Sađlıđı Genel M¼d¼rl¼đ¼, 2020).

Environment attention should be paid to cleanliness, transportation means should be frequently ventilated, common surfaces must be disinfected (WHO, 2020).

Especially people traveling from countries where the disease is located for 14 days. If they stay in their homes and have symptoms, they may contact the nearest health institution with a mask their application is of great importance (WHO, 2020). Patients, especially with other people or wearing a medical mask when going to a health facility¹⁸. Wearing a mask of the virus. Although it may limit its spread, it is not an effective method when used alone (WHO, 2020). Hand must be combined with hygiene and other measures. If there is an individual with COVID-19 at home the patient's being in a separate room from other residents, wearing a medical mask and cleaning rules care is recommended. Patients' laundry at 60-90 degrees in a separate machine wash. Also, no disinfection is required. Medical masks single is used and needs to be replaced as soon as it is moistened (Halk Sağlığı Uzmanları Derneği, 2020).

Effective protection methods for health workers to ensure control at the source. To create an isolation environment for patients diagnosed or suspicious at the beginning and people entering this environment the number comes to restrict (Halk Sağlığı Genel Müdürlüğü, 2020). Medical mask when healthcare workers enter patient rooms must use. The use of N95 mask is tracheal aspiration, which leads to aerosol formation. It is necessary during procedures such as bronchoscopy (Halk Sağlığı Genel Müdürlüğü, 2020).

Wearing gloves in public areas is not an adequate measure. Your hands regularly washing is much more effective. Contact of the hands with the face during the use of gloves can cause. With the use of gloves, the perception of hygiene in the person increases the risky behaviors may cause. Regular washing of the nose with salt water or the use of vinegar is there is no evidence that it protects (WHO, 2020). Garlic may have some antimicrobial properties and it is a healthy food. However, eating garlic from the current outbreak protects people. There is no

evidence. : Eating raw or undercooked products should be avoided (Sun and et.al., 2020; Centers for Disease Control and Prevention, 2019).

Head there is no scientific evidence for foods thought to strengthen immunity, such as trotting soup. There is no need for nutritional supplements or vitamin supplements to strengthen the immune system. The most effective methods are balanced nutrition, physical exercise and healthy sleep patterns. Enough rest is one of the effective measures recommended in disease prevention (Halk Sađlıđı Genel M¼d¼rl¼đ¼, 2020).

Hydroxychloroquine used in the treatment of malaria in viral load of patients in COVID-19 There are studies showing that it reduces the inclusion of patients' treatment algorithms began. However, no evidence of the benefits of prophylactic use of this drug. Therefore, the drug is used before the disease without the advice of a physician not suitable (T¼rk Klinik Mikrobiyoloji ve Hastalıkları Derneđi, 2020).

5. CONCLUSIONS

It is very important to stay away from false information in preventing disease and combating epidemic. Out of panic environment due to missing information and evidence-based approaches or speculative suggestions made to provide are far from scientific and such explanations in society it causes more harm than good. Accordingly, people who are not experts in the subject making unreliable statements should be avoided. The most accurate information on the subject It should be borne in mind that it will be given by competent experts in its field. Against disease that the precautions to be taken are simple and clear, it is important to apply the correct measures. It should be noted that.

REFERENCES

- Backer, J. A., Klinkenberg, D., & Wallinga, J. (2020). Incubation period of 2019 novel coronavirus (2019-nCoV) infections among travellers from Wuhan, China, 20–28. *Eurosurveillance*, 25(5).
- Centers for Disease Control and Prevention (2020). What every American and community can do now to decrease the spread of the coronavirus. [Erişim Tarihi: 15 Nisan 2020]. Erişim: <https://www.cdc.gov/coronavirus/2019-ncov/downloads/workplace-school-and-homeguidance.pdf>
- Chan, J. F. W., Yao, Y., Yeung, M. L., Deng, W., Bao, L., Jia, L., ... & Cai, J. P. (2015). Treatment with lopinavir/ritonavir or interferon- β 1b improves outcome of MERS-CoV infection in a nonhuman primate model of common marmoset. *The Journal of infectious diseases*, 212(12), 1904-1913.
- Halk Sağlığı Genel Müdürlüğü. COVID-19 Halka Yönelik Sıkça Sorulan Sorular. 2020 [Erişim Tarihi: 15 Nisan 2020]. Erişim: <https://hsgm.saglik.gov.tr/tr/covid19-sss/covid-19-halka-yonelik.html>
- Halk Sağlığı Genel Müdürlüğü. COVID-19 Sağlık Personeline Yönelik Sıkça Sorulan Sorular. 2020 [Erişim Tarihi: 15 Nisan 2020]. Erişim: <https://hsgm.saglik.gov.tr/tr/covid19-sss/covid19-saglik-personeli.html>
- Halk Sağlığı Uzmanları Derneği. COVID-19 Salgınında Sağlık Çalışanlarının Sağlığını Korumaya Yönelik Önleyici Yaklaşım. 19 Mart 2020 [Erişim Tarihi: 11 Nisan 2020]. Erişim: <https://korona.hasuder.org.tr/covid-19-salgininda-saglik-calisanlarinin-sagligini-korumayayonelik-onleyici-yaklasim/>
- Sun, P., Lu, X., Xu, C., Sun, W., & Pan, B. (2020). Understanding of COVID-19 based on current evidence. *J Med Virol* 2020. Erişim: <https://doi.org/10.1002/jmv.25722>
- T.C. Sağlık Bakanlığı (2020). T.C Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü, Covid-19 (Sars-Cov-2 Enfeksiyonu) Rehberi.
- Türk Klinik Mikrobiyoloji ve İnfeksiyon Hastalıkları Derneği. Klorokin ve Hidroksiklorokin COVID-19 Hastalarında ve Hastalığın Profilaksisinde Kullanımı Konusunda KLİMİK Derneği Görüşü. 21 Mart 2020 [Erişim Tarihi: 22 Mart 2020]. Erişim: <https://www.klimik.org.tr/koronavirus/klorokin-ve-hidroksiklorokin-covid-19-hastalarindave-hastaligin-profilaksisinde-kullanimi-konusunda-klimik-dernegi-gorusu>
- World Health Organization. Coronavirus disease (COVID-19) advice for the public: Myth busters. 2020 [Erişim Tarihi: 23 Mart 2020].

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Eriřim:<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/mythbusters>.

World Health Organization. Coronavirus disease (COVID-19) advice for the public: Myth busters. 2020 [Eriřim Tarihi: 15 Nisan 2020].

Eriřim:<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/mythbusters>

World Health Organization. Coronavirus disease (COVID-19) advice for the public:

When and how to use masks. 2020 [Eriřim Tarihi: 28 Mart 2020]. Eriřim:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/whenand-how-to-use-masks>

Young, B. E., Ong, S. W. X., Kalimuddin, S., Low, J. G., Tan, S. Y., Loh, J., & Lau, S. K. (2020). Singapore Novel Coronavirus Outbreak Research T. Epidemiologic Features and Clinical Course of Patients Infected With SARS-CoV-2 in Singapore. *Jama*, 10.

Zhou, Y., Yang, Y, Huang, J., Jiang, S., & Du, L. (2020). Advances in MERS-CoV Vaccines and Therapeutics Based on the Receptor-Binding Domain. *Viruses*, 14;11(1)