



### **Increasing COVID-19 Prevention and Control**

**\*Arif Wicaksono, Arina Nurfianti**

Universitas Tanjungpura, Pontianak, Indonesia

\* drarifwicaksono@gmail.com

#### **Abstract**

*Coronavirus Disease 2019 (COVID-19) pandemic in Indonesia still in a steady situation, confirmed case is increasing and the people's behaviour are not supporting prevention for infectious disease. Several things kind of physical distancing, Mask using, hand and environmental hygiene and stay at home had been urged by government, but still can not decrease the case. This review intend to show how important simple disease prevention and control in the daily living can help face this pandemic. Publication, news, and rules regarding COVID-19 used as materials for this article, started January 2020 to October 2021. Knowledge in basic science of COVID-19 should be increased to make people more understand about little and simple things in daily life can help COVID-19 prevention and control along with government rules and guidance. The best way to reduce confirmed cases is implementing strict COVID-19 prevention and control every day in daily life as ruled by government. Better people 's perception and knowledge about the disease surely can help the implementation of COVID-19 prevention and control.*

*Keywords; Covid-19; Prevention; Transmission*

#### **INTRODUCTION**

In mid-December 2019, there was a news that a city in China was shocked by 59 cases of respiratory problems similar to pneumonia. Seven cases were categorized as critical. According to informed sources, most of the patients visited the Huanan seafood market, which is a place for buying and selling sea animals and other animals such as bats, snakes and other wild animals (Kamps and Hoffmann, 2020; Rozaliyani, 2020).

World Health Organization (WHO) was following this case and conducting research. The results showed that this disease was caused by a virus. This virus was originally in animals but for some reason it can infect humans. The Indonesian people are apparently not aware of the dangers that threaten, they were still carrying out their activities as usual (World Health Organization, 2020a).

Coronaviruses are a large family of viruses that cause illness ranging from mild to severe symptoms. There are at least two types of coronavirus that are known to cause diseases that can cause severe symptoms such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Coronavirus Disease 2019 (COVID-19) is a new type of disease that has never been previously identified in humans. The virus that causes COVID-19 known as SARS-CoV-2 (Severe Acute Respiratory Syndrome-Coronavirus-2). Corona viruses are zoonotic (Kementerian Kesehatan, 2020a).

Based on scientific evidence, COVID-19 can be transmitted from human to human through droplets and direct contact. The high risk population were

people who had close contact with COVID-19 patients, including those who treat COVID-19 patients (Rabi *et al.*, 2020; World Health Organization, 2020b) . Age, sex, and socioeconomic backgrounds also increase risk of transmission. Several comorbid namely diabetes, Body Mass Index, obesity, immunosuppressive disease, and chronic lung disease can make COVID-19 more severe (Malik *et al.*, 2020; Liu *et al.*, 2021).

Standard recommendations for preventing the spread of infection were regular hand washing with soap and clean water, practicing coughing and sneezing ethics, avoiding direct contact with livestock and wild animals and avoiding close contact with anyone showing symptoms of respiratory illness such as coughing and sneezing. In brief, implementing Infection Prevention and Control in our daily life (World Health Organization, 2020a; Kementerian Kesehatan, 2020). This review intends to show how important simple disease prevention and control that can be done in the daily living will help people face this pandemic as standardized by WHO and Indonesian Ministry of Health.

## **METHODS**

Publication, news, and rules regarding COVID-19 used as materials for this article started January 2020 to October 2021. Publication gained from PubMed with eligibility criteria as follows : published in year 2020-2021, MeSH used were COVID-19, prevention, and guidance, full text article, general guidance and written in English. News were gained from covid19.go.id website, a trusted source for COVID-19 news and cases in Indonesia. Rules gained from official website of Indonesian government, Indonesian ministries, Province government, and regional government.

## **RESULT and DISCUSSION**

A number of 1,231 articles gained from PubMed but only 27 articles had clear guidance and can be accessed in full text. The specificity in 24 articles made them excluded so only 3 articles finally used in this study. News or report always be updated every day so there was 502 news from May 2020 to October 2021. Only 3 news had chose : May 2020 as the author start the research, May 2021 was a year after, and October 2021 as the update of current situation.

The disease first reported in December 2019, became a pandemic in february 2020 then in the early March 2020, Indonesia got the first confirmed case. In the three months period from December 2019 to March 2020, there were huge chance of the spread of the disease in this world because we never know which person is infected and can transmit the disease since many people had not been tested yet.

This is the history of COVID-19 case : in December 2019 there was 59 confirmed cases in only 1 country. In March 2020 there was 90,912 confirmed cases in 71 countries. The Mortality rate was 3.43% (World Health Organization, 2020c). The increase of surveillance, diagnostic tools, diagnostic laboratories and the human resources particular to this disease increase laboratory samples and so the confirmed cases number.

In May 2020, there was 5,370,375 confirmed cases, 6.4% mortality rate in 216 countries over the globe. In May 2021 world recorded 151,803,822 confirmed cases and in October 2021 the confirmed case is 238,521,855 with 4,863,818 death (World Health Organization, 2020d; World Health Organization, 2021a; World Health Organization, 2021b)

In the same period, Indonesia had 23,165 confirmed cases with 6.1% mortality rate in May 2020, 1,677,274 confirmed cases in May 2021, and 4,069,399 cases with 142,848 death in October 2021 (Gugus Tugas Percepatan Penanganan COVID-19, 2020, Gugus Tugas Percepatan Penanganan COVID-19,

2021a; Gugus Tugas Percepatan Penanganan COVID-19, 2021b). The case getting bigger and bigger each day, and still counting.

Corona virus is transmitted by droplets. A droplet is a splash of fluid from the respiratory tract. Why the respiratory tract? Because fatal cases occurred when the virus get in to the respiratory tract. The droplet of the patient's respiratory tract contains the infectious virus (Rozaliyani, 2020; World Health Organization, 2020e).

Coughing and sneezing ethics must be applied to protect others from the droplet. First we should cover mouth and nose using the inside of the upper arm. Not covering with hands, because after covering mouths and noses, we usually do not wash hands immediately, instead we hold something or even touch and make contact to other people or things. Then cover mouth and nose using a tissue, throw the tissue into the trash for infectious items and do hand wash. Last, Using a mask, when we don't have time to cover our mouth and nose and when we don't have tissue, then it would be safer and healthier if we use a mask (Bakhtiar, 2020).

For the general using, it is recommended to use a regular mask or cloth mask. It seems trivial. Using a cloth mask. But wearing a cloth mask can help prevent the transmission of COVID-19 by helping reduce the chances of inhaling the virus in public places, where no one knows which one infected or not, and they are relatively cheap, re-washable and simple. World Health Organization recommends the use of cloth masks for the public with 3 layers cloth masks. The outer layer is waterproof, the innermost layer is able to absorb water and the middle layer is a filter (World Health Organization, 2020c).

Cloth masks can be reused with several steps: after each use, wash it immediately. For example, we go out of the house, to a certain place. After arrived, change the mask. When we came home we should wash 2 used masks immediately. Then wash the cloth mask using soap and warm water and dry it by drying it in heat of the sun. It is better to have more than one cloth mask, when one is washed, we can use another mask (Office of the Principal Scientific Advisor, 2020).

Hand hygiene is the best way to prevent the spread of germs, both in the health service and in the community. The hand is the main actor in transmission. We use our hands to do almost all activities, such as shaking hands, writing, holding gadgets and holding objects around us (World Health Organization, 2020c).

Then what does this have to do with soap? Why not just water? Or just use alcohol to clean your hands? It already known that the virus is a very small infectious agent, so if we only use water, the dirt on the skin can be lifted and lost, but the virus still survives, the virus in the body, will protect itself using lipid membrane. The soap will bind to the virus membrane, pulling out the virus membrane so that the virus "fortress" will be damaged and destroyed. The body of the virus will open, its genetic material will come out and be destroyed (Reed, 2020; Thordarson, 2020).

Social distancing is maintaining social distance. Not being close to people or meeting people, even the closest to prevent the spread of the virus. Initially, WHO used the word social distancing, then it was revised to physical distancing because some people became very afraid and stressed if they couldn't socialize with other people or people around them (Centers for Disease Control and Prevention, 2020).

Physical distancing is to keep a distance between ourselves and others. So people can still interact socially but still maintaining distance. Why need this

spacing? And why is there a certain radius? This is because from research, patients can "fly" a droplet by coughing, sneezing, talking or yelling the furthest is 2 meters. This is why the recommendation to keep a distance of 2 meters. People should maintain a minimum distance of 2 meters from other people, do not get together and stay away from crowded places or events that gather large numbers of people (Departement of Health, 2020).

The Indonesian government has urged people to do physical distancing by asking business owners and consumers to maintain a distance of 1-2 meters, use a barrier between consumers, and if using a lot of chairs, there will be seats that can be occupied (no red cross) and chairs that must not be occupied (marked with a red cross) while maintaining a distance of 1-2 meters (Kementerian Kesehatan, 2020b; Kementerian Kesehatan, 2020c; Menteri Dalam Negeri, 2020a; Walikota Pontianak, 2020).

Government should force people to do COVID-19 prevention and control. The policy from the top of Indonesian Government implemented to the provinces, regions, cities, and citizen's resident. All people should do this program and the government always monitor, report, guide the prevention and control and evaluate the cases and systems (Presiden Republik Indonesia, 2020; Menteri Dalam Negeri, 2020b).

The main problem is perception of the people. When people do not understand, do not care and ignore the disease, the case will never be controlled. Government had made policy that make people obey the system. Government can make punishment to the people that do not obey the rules in administrative, financial, or managerial matter (Presiden Republik Indonesia, 2020; Menteri Dalam Negeri, 2020b).

Knowledge in basic science of COVID-19 should be increased to make people more understand about little and simple things in daily life can help COVID-19 prevention and control along with government rules and guidance.

## **CONCLUSION**

The best way to reduce confirmed cases is implementing strict COVID-19 prevention and control every day in daily life as ruled by government. Better people's perception and knowledge about the disease surely can help the implementation of COVID-19 prevention and control.

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