PREVENTION OF THE SPREAD OF THE COVID-19 VIRUS

Maya Aprilia

Faculty of Public Health, Muhammadiyah University of Jakarta
K.H. Ahmad Dahlan Street, Cireundeu, Ciputat, South Tangerang, Banten 15419
E-mail: qaireenbatrisya050513@gmail.com

ABSTRACT

Clean and Healthy Lifestyle's Impact in Concern to Covid-19 Prevention. From the beginning of 2020 until now, the COVID-19 pandemic has not yet ended in many countries. COVID-19 has been the reason for more than 991,000 deaths in the world and 8,000 deaths in Indonesia alone. This contagious virus is spreading among humans through droplets, which make it dangerous for a human to make direct contact to one another. Based on government recommendation, Perilaku Hidup Bersih dan Sehat (PHBS) or Clean and Healthy Lifestyle is one of many methods to protect ourselves from COVID-19. Regularly washing your hands with clean water dan consuming healthy foods are part of PHBS or Clean and Healthy Lifestyle which hopefully can grow into a habit to each especially in a pandemic situation like this.

Keywords: *COVID-19, Clean and Healthy Living Behaviors (PHBS), Clean and Healthy Lifestyle, Washing Hands, Clean Water*

INTRODUCTION

At the beginning of 2020, the world was faced with an outbreak of an infectious disease called the Covid-19 virus or also known as the Coronavirus. From the end of 2019 until now, the incidence continues, experiencing a very rapid increase and the spread of the Covid-19 virus infection is very high. quickly to all parts of the world including Indonesia. The case of Covid-19 in Indonesia has shocked the public and caused fear from various circles. Covid-19 is a disease caused by the SARS CoV-2 virus with general symptoms of mild and severe acute respiratory tract disorders including fever, cough, shortness of breath, fatigue, runny nose, sore throat, and diarrhea. In general, the transmission of this virus occurs through droplets or body fluids that are splashed on someone or objects around them which is 1-2 meters away through coughing and sneezing. Public knowledge is very influential on behavior in doing prevention. According to Notoatmojo (2012), behavior is an activity of a person concerned and has a very broad capacity including walking, talking, reacting, and dressing. The key to preventing transmission of this virus can be implementing clean and healthy living behaviors such as washing hands, consuming healthy food, exercising, and getting enough rest. Clean and Healthy Life Behavior (PHBS) is all health behavior that is carried out with awareness, so that family or family members can help themselves in the health sector and play an active role in health activities in the community. PHBS is the best step in preventing the spread of this virus, so it needs to be instilled in all levels of society about PHBS knowledge because, in reality, clean and healthy living behavior is difficult to implement due to lack of knowledge and lack of awareness of the community itself. From this background, the author is interested in making a scientific paper with the title "Prevention of the Spread of the Covid-19 Virus" by changing the mindset of behavior with Living and Clean behavior through conveying information about the latest Covid-19.

According to the Ministry of Social Affairs of the Republic of Indonesia (2020), Clean and Healthy Living Behavior (PHBS) is one of the efforts in preventing the transmission of Covid 19. PHBS is an effort made by the community to prioritize health to be able to realize a more quality life and this behavior must be practiced every day. day to form a habit. PHBS has various indicators that are an appeal from the government to prevent infectious diseases including, using clean water, washing hands with soap (CTPS) properly, eating healthy and nutritious food, and doing physical activity every day (Kemsos, 2020).

METHODS

In this study, using journal review methodology On 11 February 2020, WHO Director-General, Dr. Tedros Ahanom Ghebreyesus, named SARS-CoV-2 as COVID-19 (Gennaro et al, 2020). COVID-19 is inflammation of the lung parenchyma with a viral etiology of SARS-Cov-2 (PDPI, 2020).

According to Susilo et al (2020), the most transmission of COVID-19 occurs from human to human, transmission occurs through droplets released when humans perform reflexes in the form of sneezing and coughing. Apart from droplets, several studies have shown that COVID-19 is spread through aerosols, where the virus can stay in the air for at least 3 hours. According to PDPI, every 1 patient can infect 3 people around him and the possibility of transmission during the incubation period of 14 days causes the transmission time from the patient to the surrounding people to be longer so that it can increase the percentage of people who are infected (Susilo, 2020). According to PDPI (2020), the Coronavirus is a zoonosis (disease transmitted from animals to humans). However, it is not yet clear whether COVID-19 zoonoses or not, although according to phylogenetic data it is possible that COVID-19 is zoonotic (PDPI, 2020).

There are several definitions used for other surveys, including:

1. Suspected Case Category A, Someone who meets the clinical and epidemiological criteria:

Clinical criteria:

- a. Fever with acute onset and cough, or
- b. Acute onset of two or three of the following symptoms: fever, cough, fatigue, headache, muscle aches, pain
- c. throat, runny nose, out of breath,
- d. anorexia/nausea/vomiting, diarrhea, altered mental status out of breath,

2. Epidemiological Criteria:

- a. Living or working in an area with a high risk of virus transmission, any time within 14 days until symptoms appear, or
- b. Residing or traveling with an infected community, any time within 14 days until symptoms appear, or
- c. Work in a health-related setting, either in a health facility or in isolation, any time within 14 days until symptoms appear, or
- d. Category B, patients with severe symptoms of acute respiratory illness with a history of fever 38o C; cough; within 10 days; and need hospital care

3. Probable Case / Probable Case Category A, patients who meet clinical criteria and epidemiological criteria and have been in contact with probable or confirmed cases, or are epidemiologically connected to a cluster containing confirmed case-patients.

Category B, suspected cases with COVID-19 features:

- a. Thoracic radiograph
- b. CT scan of the thorax
- c. Pulmonary ultrasound

Category C, someone with symptoms of anosmia that occurred soon, ageusia

Category D, death in someone with respiratory problems, and someone who has been in contact with suspected, confirmed, or epidemiological cases connected to a cluster containing confirmed case patients.

4. Confirmed COVID-19 Case/confirmed case

A person who has been clinically confirmed to have contracted COVID-19 without seeing signs and symptoms. Based on the COVID-19 Management Protocol issued by PDPI, PERKI, PAPDI, PERDATIN, and IDAI, there are five groups based on the severity of COVID-19 cases, there are:

- a. No Symptoms

No symptoms were found in the patient

- b. Mild / without complications

The patient is infected in the respiratory tract but has no complications, there are only non-specific symptoms such as fever, cough, malaise, etc.

- c. Moderate

Patients, both adolescents, and adults who are infected with pneumonia, but no severe pneumonia is detected and do not need supplementation or pediatric patients who are infected with mild pneumonia with complaints of difficulty breathing, rapid breathing, and cough

- d. Severe/ Severe Pneumonia

Adolescent patients and above with symptoms of fever or are under surveillance due to urinary tract infection breath/pneumonia, plus one of respiration rate 30 breaths/min, severe respiratory distress, or O₂ saturation <93% at PaO₂/FiO₂ ratio <300. Or pediatric patients with symptoms of difficulty breathing or coughing, plus at least one of the following:

- 1) O₂ saturation <90%;

- 2) Severe respiratory distress (snoring or difficulty breathing);
- 3) Signs of severe pneumonia, either convulsions, inability to drink, or allergies;
- 4) Other signs of pneumonia

5. Critical

Patients who have experienced Acute Respiratory Distress Syndrome, respiratory failure, multiple organ failure, and/or septic shock.

According to the Clinical Practice Guidelines (PPK) issued by PDPI (2020), regarding the management of COVID-19, it is stipulated that:

- a. Isolate in all cases, use a well-ventilated room, and position the patient at least 1 meter.
- b. Implement infection prevention and control (PPI).
- c. Perform serial chest X-rays.
- d. Oxygen therapy with target oxygen saturation $O_2 < 94\%$.
- e. Quinolone combination antibiotic therapy (Meropenem(3x1000mg IV and Levofloxacin 1x750mg IV).
- f. Oseltamivir 2x75 mg orally via nasogastric tube.
- g. Do not give corticosteroids
- h. Paracetamol 500 mg, three times a day
- i. Vitamin C 1 x 400mg IV
- j. Other drugs according to aggravating disease
- k. Fluid therapy
- l. Treat shock according to septic shock management procedures
- m. If you have septic shock, use a vasopressor
- n. Please note that anti-COVID-19 has not been found
- o. Mechanical ventilation in respiratory failure or ARDS
- p. The use of high-flow nasal oxygen (HFNO) and non-invasive ventilation is only for selected patients with hypoxemic respiratory failure and should be used. receive close monitoring to monitor clinical deterioration.

RESULTS AND DISCUSSION

Behavior is an individual's response to a stimulant or an action that can be observed and has a specific frequency, duration, and purpose, whether based on or not. Health Behavior

Domain According to Benjamin Bloom (1908) in Notoatmodjo (2012), behavior is divided into 3 domains. The division of this domain is carried out for educational purposes, namely developing or improving the three behavioral domains, which consist of the cognitive domain (cognitive domain), psychomotor domain (psychomotor domain), and affective domain (affective domain). The three behavioral domains are measured by: (1) Knowledge (Knowledge). is the result of knowing, and this happens after someone senses a certain object. Without knowledge, a person does not have a basis for making decisions and determining actions to deal with the problems at hand; (2) Attitude, is a reaction or response that is still closed from a person to a stimulus or object; (3) Practice or action, an attitude that has not been manifested in an action (overt behavior). To realize the attitude into a real difference, it is necessary to have facilities and capabilities. Preventive behavior is taking action before an incident occurs.

The influence of health worker support on Covid-19 prevention behavior that the support of health workers affects knowledge of Covid-19 prevention and family support also has a good influence on Covid-19 prevention behavior.

Prevention of Covid-19 is very important to do through the method of providing information through the media that can have an impact on increasing correct knowledge about preventing the spread of Covid-19. Coronavirus is a pandemic that spreads quickly. Therefore, many leaders have urged their citizens to practice clean living behavior (PHBS), social distancing, and isolation to prevent the transmission of this disease virus.

In Widiyani (2020), Due to the very fast transmission of the coronavirus, the World Health Organization (WHO) designated the coronavirus as a pandemic on March 11, 2020. The status of a global pandemic or epidemic indicates that the spread of Covid-19 is taking place so quickly that almost no countries in the world are affected. a world that can ensure that it is protected from coronavirus. Coronavirus can easily spread and infect anyone regardless of age. This virus can be transmitted easily through contact with sufferers. Unfortunately so far

there is no specific drug to treat cases of coronavirus infection or Covid-19.

Prevention efforts that can be done are by carrying out various activities, one of which is counseling to be able to provide scientific data and information to all levels of society about the coronavirus in Indonesia through online media that can be reached by the public. Knowledge is very influential on the target community in providing educative information with more innovative methods. The most effective way to prevent the spread of Covid-19 is to break the chain of transmission associated with the methods of transmission of Covid-19.

Transmission of Covid-19 infection mainly occurs through physical contact. Based on this mode of transmission, the prevention of Covid-19 is focused on safe and responsible social behavior patterns, namely self-isolation by staying at home. The influence of health worker support on Covid-19 prevention behavior that the support of health workers affects knowledge of Covid-19 prevention and family support also has a good influence on Covid-19 prevention behavior.

Although the WHO, the Centers for Disease Control and Prevention (CDC), and the Indonesian Ministry of Health have issued a lot of actual information and guidelines related to Covid-19, many people do not understand it properly. To prevent the spread of Covid-19, it is not only completed with social distancing but must be accompanied by the application of clean and healthy living behavior (PHBS). WHO urges all people to maintain health and protect others by washing hands frequently, practicing social distancing, avoiding touching eyes, nose and mouth, maintaining personal hygiene, if you feel fever, cough, and shortness of breath, seek medical help immediately and keep updating information you.

How to prevent the coronavirus suggested by the Indonesian government through the Ministry of Health (Kemenkes) of the Republic of Indonesia to urge the public to prevent the spread of Covid-19 by increasing public behavior and knowledge and implementing a healthy and clean lifestyle. every day by: Always maintain hand hygiene by washing hands with running water and soap for 20 seconds then rinse; Apply good coughing and sneezing etiquette by covering your nose and mouth with a tissue or sleeve so as not to infect others; Eat a nutritionally balanced diet; Eating fruits and vegetables; Do a minimum of half an hour of exercise every day; Increase endurance; Get enough rest and seek treatment immediately if you are sick.

Prevention of transmission of this virus can be prevented by implementing a Clean and Healthy Lifestyle (PHBS), such as washing hands properly and properly, coughing etiquette, and maintaining health and the immune system. Scientific, accurate, and reliable public knowledge and understanding can help to easily implement it in suppressing the spread of Covid-19 in Indonesia. On this basis, it is necessary to carry out information-giving activities to increase public knowledge in dealing with and passing the Covid-19 pandemic. Holding medical-based counseling about PHBS so that it can reach all levels of society and can practice PHBS in daily life and become an example for the surrounding community. In this case, there needs to be ongoing socialization regarding clean and healthy living behavior because there are still many people who do not understand so that many people still consider this PHBS unimportant.

But people don't need to worry during this Covid-19 pandemic because of the implementation of PHBS which includes maintaining nutritious food, getting enough rest, being able to boost the immune system, and being able to control Covid-19 infection. Self-protection can be done by using a mask, always washing hands thoroughly, and maintaining a healthy and clean lifestyle to prevent the virus from entering the human body. Combating the Corona Covid-19 virus, the key is to maintain a clean and healthy lifestyle (PHBS), this is very simple but very effective to do. One of them is getting used to washing hands with soap or hand sanitizer after every activity.

According to Sulaeman and Supriadi (2020), in addition to providing the public with knowledge about Covid-19, it is also necessary to provide knowledge about an important key to avoiding transmission/transmission of the Covid-19 virus, namely knowledge about health and a clean and healthy lifestyle (PHBS). Providing material on the environment and health as well as a clean and healthy lifestyle will help people avoid Covid-19 and other infectious diseases. Health education will also increase public awareness of the importance of protecting the environment and oneself to stay healthy.

A healthy environment will greatly help the people who live in it to feel comfortable, calm, and happy so they can enjoy life. A healthy body can be obtained by consuming clean and healthy food and complete nutrition. A healthy body will be very difficult to be infected by various dangerous disease agents such as Covid-19 or other diseases because a healthy body has a strong defense (immunity) and is easy to heal itself.

There are 5 M :

wearing a mask, keep the distance, washing hands, avoiding the crowd, reduce mobility.

CONCLUSION AND SUGGESTIONS

Clean and healthy living behavior is a strategy that can prevent the spread of Covid-19. The public is continuously encouraged to improve clean and healthy living behavior to prevent the spread of Covid-19 because community behavior plays an important role in reducing the number of Covid-19 spreads. PHBS is one of the strategies in preventing the spread of Covid-19 which is very effective and easy to do by all levels of society. So the public needs to be encouraged to continuously carry out the PHBS movement which can be the key to preventing the spread of Covid-19 during this pandemic.

BIBLIOGRAPHY

BioScience Trends Advance Publication https://www.jstage.jst.go.jp/article/bst/advpub/0/advpub_2020.01047/_pdf.

Burhan, E., Dwi Susanto, A., Nasution, S. A., Ginanjar, E., Wicaksono Pitoyo, C., Susilo, A., Firdaus, I., Santoso, A., Arifa Juzar, D., Kamsul Arif, S., Lolong Wulung, N. G., Damayanti, T., Heru Wiyono, W., Isbaniah, F., Handayani, D., Sugiri, J. R., Rizal Wahyudi, E., Juli Edi Tarigan, T., Hidayat, R., ... Katu, S. (2020). *PROTOKOL TATALAKSANA COVID-19 TIM PENYUSUN Perhimpunan Dokter Paru Indonesia (PDPI) Perhimpunan Dokter Spesialis Kardiovaskular Indonesia (PERKI) Perhimpunan Dokter Spesialis Penyakit Dalam Indonesia (PAPDI) Perhimpunan Dokter Anestesiologi dan Terapi Int.*

Covid-19, G. T. (2020). *Protokol Percepatan Penanganan Pandemi Covid-19 (Corona Virus Disease 2019)*. 19, 31.

Di Gennaro, F., Pizzol, D., Marotta, C., Antunes, M., Racalbuto, V., Veronese, N., & Smith, L. (2020). Coronavirus diseases (COVID-19) current status and future <https://doi.org/10.3390/ijerph17082690>

Jianjun Gao, Zhenxue Tian, Xu Yang. (2020). Breakthrough: Chloroquine phosphate has shown apparent efficacy in treatment of COVID-19 associated pneumonia in clinical studies

Kottasova, I. (2020, Maret 17). Coronavirus Lockdowns: 24 Hours of Confusion Around the World. Retrieved from CNN Health.

Miftah Apriani, Tridamayanti. (2019). Penerapan Perilaku Hidup Bersih Dan Sehat Dengan Pencegahan Penyakit Demam Berdarah Dengue, *Jurnal „Aisyiyah Medika*. Volume 4 Nomor 3.

Notoatmodjo, S. (2012). Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta.

Satria. (2020). *Perilaku Hidup Sehat Kunci Pencegahan Virus Corona*. <https://ugm.ac.id/id/newsPdf/19085-perilaku-hidup-sehat-kunci-pencegahan-virus-corona>

Sulaeman dan Supriadi. (2020). Peningkatan Pengetahuan Masyarakat Desa Jelantik Dalam Menghadapi Pandemi Corona Virus Diseases–19 (Covid-19). *Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat*. Vol. 1 No.1: 12-17. <http://ojs.ikipmataram.ac.id/index.php/jpu>

Perhimpunan Dokter Paru Indonesia PDPI. (2020). *Paduan Praktik Klinis Pneumonia COVID-19 berat tanpa komplikasi*.

- perspectives: A narrative review. *International Journal of Environmental Research and Public Health*, 17(8).
- Purnawati, Yuni. (2011). *Hubungan Antara Pengetahuan Dan Sikap Dengan Perilaku Pencegahan Penularan Penyakit Tb Pada Penderita Tb Paru Dewasa Muda di BBKPM Surakarta Tahun 2011*. Skripsi. Surakarta. Universitas Muhammadiyah Surakarta.
- Veronika, Stefina. (2015). *Hubungan Pengetahuan Dan Sikap Keluarga Terhadap Perilaku Pencegahan Tuberkulosis Paru di Kelurahan Terjun, Medan Marelan Tahun 2015*. Karya Tulis Ilmiah. Medan. Universitas Sumatra Utara Wawan dan Dewi M. (2010). *Teori dan Pengukuran, Pengetahuan, Sikap dan Perilaku Manusia*. Yogyakarta: Nuha Medika.
- Widiyani, R. (2020). *Latar Belakang Virus Corona, Perkembangan hingga Isu Terkini*. Retrieved from detik News: <https://news.detik.com/berita/d4943950/latar-belakang-virus-coronaperkembangan-hingga-isu-terkini>
- WHO. (2020). *Coronavirus disease 2019 (COVID-19) Situation Report – 72 Data as reported by national authorities by 10:00 CET 1 April 2020* <https://apps.who.int/iris/bitstream/handle/10665/331685/nCoVsitrep01Apr2020-eng.pdf>
- World Health Organization. (2019). *Coronavirus*. Retrieved from World Health Organization: <https://www.who.int/healthtopics/coronavirus>
- WHO. (2020). *Coronavirus disease 2019 (COVID-19) Situation Report – 72 Data as reported by national authorities by 10:00 CET 1 April 2020* <https://apps.who.int/iris/bitstream/handle/10665/331685/nCoVsitrep01Apr2020-eng.pdf>