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HEALTH EDUCATION TO PREVENT INFECTION OF COVID-19 ABSTRACT Coronavirus disease (COVID-19) caused by SARS-COV2 is a disease with a very high transmission rate and can potentially die. This disease is of great public health concern in the world and is considered a humanitarian disaster. Person-to-person transmission of COVID-19 occurs through close contact and droplets. So, the prevention by using masks, hands washing with soap, and social distancing. The circulation of misinformation causes a low level of public awareness. It will increase the risk of spreading the disease.

Community service aims to increase public knowledge about the prevention and spread of the COVID-19 disease. A total of 100 target households have been visited and educated during the service. We have also distributed 250 masks and 500 leaflets and put up banners in open places containing what and how to prevent COVID-19. Installation of a portable for hands washing using soap is also carried out to reduce transmission risk. Dissemination of valid information must be carried out on sustain to change people's behavior. The involvement of all elements of society is needed to create a new normal era of life.

Keyword: COVID-19, education, handwashing, leaflet, mask INTRODUCTION In early December 2019, the first case of respiratory disease with pneumonia was caused by an unidentified new strain of the virus in Wuhan City, Hubei Province, China. The World Health Organization (WHO) named it Coronavirus 2019 (COVID-19) on February 11th, 2020, and declared it a pandemic on March 11th, 2020 1,2. This epidemic spread rapidly throughout the world, and as of March 26th, 2020, it had been in 197 countries 3. Coronaviruses are a group of disease-causing viruses transmitted zoonoses (between animals and humans), ranging from mild to severe symptoms. Previously, two types of coronavirus were known to cause disease in humans and epidemics; there is Middle East Respiratory Syndrome (MERS-CoV) which is transmitted through civet cats (civet cat) and Severe Acute Respiratory Syndrome (SARS-CoV) via camels 4. Symptoms of COVID-19 infection include acute respiratory distress such as fever, cough, shortness of breath, and X- rays show large pneumonia infiltrates in both lungs. The period of incubation is 5-6 days, and the longest is 14 days. In severe cases of COVID-19, it can cause pneumonia, kidney failure, and even death 4. About the pathogenicity, clinical spectrum, and epidemiology, COVID-19 is similar to the SARS-CoV virus.

Comparing the genome sequences of COVID-19, SARS-CoV, and the Middle East Respiratory Syndrome coronavirus (MERS-CoV) shows that COVID-19 has a better sequence identity than SARS-CoV compared to MERS-CoV. However, the amino acid sequence of COVID-19 is different from other coronaviruses, especially on polabrotein 1ab and the glycoprotein or protein-S surface 5. Although some animals have been suspected of being a reservoir for COVID-19, no animal reservoir has been confirmed to date.

Several studies suggest that the human receptor for COVID-19 may be an angiotensin-converting enzyme 2 (ACE2) receptor similar to SARS-CoV. The COVID-19 nucleocapsid (N) protein has nearly 90% of the amino acid sequence identity with SARS-CoV. The protein N antibodies from SARS-CoV can cross- react with COVID-19 but may not provide cross-immunity. Like SARS-CoV, the COVID-19 N protein can play an important role in suppressing RNA (RNAi) disruption to overcome host defenses 4,5. As of May 10th, 2020, globally, there were 4,178,097 confirmed COVID-19 cases with 283,732 deaths. The United States has the highest number of confirmed cases, with 1,367,638 confirmed cases and 80,787 deaths 6.

In Indonesia, the first case of COVID-19 infection was reported on March 2nd, 2020, in Depok, West Java. In the early phase, the spread was relatively slow until the second week, and only 96 cases were recorded and were concentrated in Jakarta and its surroundings. However, the number began to rise rapidly until May 10th, 2020, there were 14,032 cases with 973 deaths 6).

Currently, no drug or vaccine specifically treats or prevents COVID-19 infection 5,7 – 12, the COVID-19 pandemic is a major world health crisis and is declared an enemy of humanity 13. In this condition, the only option is to prevent infection and prepare the health care system for a possible increase in patients' numbers. Based on empirical evidence, COVID-19 is transmitted from person to person through close contact and droplets so that the person most at risk of infection is the person in contact with the

sufferer 4.

In principle, preventive measures for infectious diseases are carried out by closing all the entry gates (portal of entry) causing the disease (agent) and controlling the exit (portal of exit). In COVID-19, the entry portal is the mouth, nose, and eyes, while the exit is the nose and mouth 14,15. According to the Ministry of Health, actions that must be taken to prevent COVID-19 are: washing hands with soap or using a hand sanitizer, avoiding touching the eyes, nose, and mouth, practice the etiquette of coughing or sneezing by covering the nose and mouth with the inner upper arm or tissue, use a mask and perform hand hygiene after removing the mask, and maintaining a distance (at least one meter) from people experiencing respiratory symptoms 4.

There have been various reactions in society related to the COVID-19 pandemic, ranging from disbelief to fear and panic. In groups who do not believe, there is a risk of catching or spreading it. Meanwhile, other groups will experience stress to depression. The diversity of reactions is influenced by the abundance of information that is not entirely accurate 16 and communication errors (Dani & Mediantara, 2020. The dominant disinformation from the internet and social media will affect knowledge that impacts people's behavior in preventing COVID-19 16 – 19.

Rajabasa Pemuka Village is located in Rajabasa District, Bandar Lampung City, with 7,399 people consisting of 1,733 families and an area of approximately 3.23 KM2. Administratively, Rajabasa Pemuka consists of 18 Rukun Tetangga (RT). Based on data from the Rajabasa Indah Health Center, until September 30th, 2020, there were five cases of COVID-19 confirmation. The presence of cases in the population, the large number of residents, and the type of clustered settlement will increase the potential for the spread of COVID-19.

Community service aims to increase public knowledge about the prevention and spread of the COVID-19 disease through counseling, installing leaflet distribution posters, and distributing masks and handwashing facilities in public places. METHODS Community service was carried out in the Rajabasa Pemuka Village, Bandar Lampung City (Fig. 1), in November 2020. We are focusing on activities in five RTs where COVID-19 confirmation cases domicile. The number of servants is five lecturers at the Tanjungkarang Health Polytechnic and ten students. The service targets were 100 households close to the case and places where people could gather, such as stalls, shops, and mosques. Fig. 1.

Map of Rajabasa Pemuka Village, Bandar Lampung City Community service is carried out in four stages (Fig. 2), situation analysis, common perception and planning, action, and evaluation. Situation analysis to determine the problem, potential spreading of cases.

The coordination was carried out with activity partners (the Rajabasa Indah Community Health Center and the Rajabasa Pemuka Village authority). This stage aims to explain the activities to be carried out, including the strategies, objectives, and targets to be achieved.

The action's implementation is a community education activity carried out through door-to- door counseling, installing banners in public places, and distributing leaflets and masks. In this service, we also gave a hand-washing portable unit. We installed it in the mosque because the mosque is a place where many people gather. The evaluation was carried out to determine the success of the activities as measured by targets' achievement. Fig. 2. Four stages of community service activities scheme RESULTS AND DISCUSSION The service was carried out for three weeks in five RTs of the Rajabasa Pemuka Village. Volunteers are lecturers and students of the Tanjungkarang Health Polytechnic.

The community service partners are Rajaba Indah Public Health Centre, Rajabasa Pemuka Vilage, Bhayangkara Community Security and Order (Babinkamtibmas), Village Guidance Army (Babinsa), and Rukun Tetangga. In preventing COVID-19, community empowerment must involve community components by exploring their potential to play a role in preventing the transmission of COVID-19 4. A service provider carries out a situation analysis with the Puskesmas to map problems, potentially spread disease and potential in the community.

The results of the situation analysis: - In Rajabasa Pemuka Village, there were reported five cases of COVID-19 confirmation spread across five different RTs. - Characteristics of human settlements are not evenly distributed but centered. In five RTs, there were cases included in the solid category. Situation Analysis Coordination and Common perception Action Evaluation - The observations show that community behavior is not good in preventing COVID-19, seen from the orderliness of wearing masks and not maintaining a distance.

It is suspected that there is still low-knowledge and understanding of the transmission of COVID-19. Based on the situation analysis results, there is a high potential for the spread of the COVID-19 virus in residential areas. Person-to-person model transmission of COVID-19 is through close contact and droplets 4. So, the community service target is all households close to the case house and places where people can potentially gather. No education will give to cases or family cases because it has become part of the Bandar Lampung City COVID-19 Task Force Team's duties and authority. The program strategy is to provide education, either directly or using the media. Situation analysis to collect information includes the types and forms of activities, the parties involved, the actions and strategies to be taken, and the budget needed to implement the program 20. Perception equations are carried out with Community Health Centre and village authority, aiming to explain plans, strategies, and targets for activities and divide each partner's roles. The division of roles is a form of commitment and responsibility from each partner towards implementing service.

It was agreed that educational activities would be held for two weeks, and all partners will participate in accompanying the implementation of educational activities. At this stage, it was also agreed that Babinkamtibmas and Babinsa as assistants in educational activities. Educational activities aim to provide the widest possible information to the public about the COVID-19 disease. There are the causes of disease, infection symptoms, modes of transmission, prevention methods, health protocols, groups at high risk of infection, comorbidities, and straightening out inaccurate information circulating in the community.

Disinformation impacts people's behavior in preventing COVID-19 16 – 19. The strategy taken was to visit every house adjacent to the case house, provide education, and open up opportunities for the target to ask questions to establish good communication. We also distributed masks and leaflets as a medium of information. The use of leaflets as a medium for an extension can increase public knowledge to prevent COVID-19 18. The results show that most people get wrong information about COVID-19, so they do not understand the purpose of using masks, washing hands, and maintaining distance.

Invalid information, mostly from social media, results in low-knowledge in preventing the transmission of COVID-19 16. Knowledge is closely related to using masks 17 and maintaining distance 19. Apart from visiting and educating 100 households, a portable handwashing unit was also installed in the mosque. The location for the installation was chosen because the mosque was a gathering place for many people. Hopefully, the place to wash hands is used before entering and after leaving the mosque, thereby reducing transmission risk. Fig. 3.

Educational activities, distribution of masks and leaflets, installing banners in public places, and hands-washing portable unit. Activity evaluation is carried out with partners to assess program success, target achievement, and follow-up. The evaluation results stated that community service activities were carried out following the set plans and activity targets. Community acceptance (response) to community service activities is considered good, and it can be seen from the number of target households that participate.

A total of 100 households were visited and educated, 250 masks and 500 leaflets were distributed with explanations, five banners in public places containing ways to prevent COVID-19, and gave a portable handwashing unit. The involvement of partners in activities is considered good, and it can be seen from their activity during service activities. In this service, an assessment of behavior change in preventing the spread of COVID- 19 cannot be carried out due to time constraints. However, through the provision of valid information, the distribution of masks, leaflets, and handwashing stations is expected to trigger changes in attitudes and behavior in society.

According to Lawrence Green, there are three main factors in health behavior, namely predisposing factors (such as age, education, knowledge, religion, and culture); enabling factors (such as health facilities and information media); and reinforcing factors (such as supporting from the government, religious and community leaders) 21,22. In this service activity, all three factors have been included in the behavior change process. The education for increase knowledge in first-factor intervention, using media for information in the second factor, and support from government and community leaders on the third factor.

Health workers' involvement is important in changing public health behavior 23. The division of roles must be carried out in community empowerment in preventing transmission of COVID-19 24. The evaluation results recommend that community service can be carried out sustainably with a wider coverage area. CONCLUSION Community service can be carried out properly, according to the predetermined plans and targets. A total of 100 target households have been visited and educated, distributing 250 masks and 500 leaflets, installing banners in public places containing ways to prevent COVID-19, and gave a portable handwashing unit.

Community acceptance of community service activities is considered good, and it can be seen from the number of participating households. The involvement of partners at every stage activity shows a high commitment and responsibility to the community's social and health conditions. A wider coverage area and partners are needed for future activities.

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