



## **COMMUNITY EMPOWERMENT BY INCREASING KNOWLEDGE IN HANDLING EMERGENCIES AT HOME DURING THE COVID-19 PANDEMIC**

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### **ABSTRACT**

*The Covid-19 pandemic is still one of the causes of high morbidity and mortality rates worldwide, including in Indonesia. One of the causes of the high morbidity and mortality rates in Covid-19 sufferers is due to inappropriate treatment when self-isolated at home. This lack of care is due to a lack of public knowledge in caring for COVID-19 sufferers at home, especially for patients with comorbid diseases such as cardiovascular, gastrointestinal, and pulmonary diseases. Therefore, it is necessary to carry out a program to increase public knowledge to have a positive attitude in treating Covid-19 patients at home. Health education activity was conducted to provide and increase public knowledge about handling actions to overcome emergency conditions of cardiovascular, gastrointestinal, and pulmonary diseases during self-isolation at home. This activity was carried out online through the Zoom application and was attended by 72 participants. Public knowledge about handling emergency conditions of cardiovascular, gastrointestinal, or pulmonary disease in self-isolating patients at home still needs to be improved.*

**Keywords:** covid-19, knowledge, emergency, community, health education.

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## INTRODUCTION

Covid-19 is a disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first reported in Wuhan, China, on December 31, 2019. SARS-CoV-2 has never been identified before in humans and is a new type of coronavirus. Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) are two types of coronavirus known as diseases that can cause severe symptoms. Covid-19 has an incubation period of 14 days and an average of 5-6 days (Susilo et al., 2020).

Amid the scarcity of medical therapy options and vaccines, COVID-19 has had an unprecedented global impact on public health and healthcare. Due to the high demand for intensive care units (ICU, intensive cardiovascular care unit/ICVCU, intensive cardiac care unit/ICCU) equipped with breathing apparatus and mechanical ventilation; a mechanism for redistribution and reorganization of resources from the hospital is needed with various consequences for all medical staff (Perki, 2020).

Covid-19 can cause acute respiratory symptoms such as fever above 38°C, cough, and shortness of breath for humans. In addition, it can be accompanied by weakness, muscle aches, and diarrhea. In patients with severe COVID-19, it can cause pneumonia, acute respiratory syndrome, kidney failure, and even death. The signs and symptoms caused by Covid-19 can attack various systems in the body, including the pulmonary system, gastrointestinal system, cardiovascular system, and household. It does not rule out the possibility of causing an emergency condition, so knowledge is needed for the general public to know the procedures that can be taken to reduce the number of deaths that occur due to Covid-19 (Ministry of Health, 2020).

Based on the above, it is very important to increase community empowerment by providing information about emergency management in the gastrointestinal, cardiovascular, and pulmonary systems to manage and consider when doing self-isolation at home so that it can be applied in everyday life during this pandemic.

The purpose of this community service activity is to empower the community by increasing public knowledge about emergency management of the gastrointestinal system, pulmonary system, and cardiovascular system during the Covid-19 pandemic and about self-isolation at home during the Covid-19 pandemic.



## **METHODS**

This community service activity is carried out by providing education or health education to the general public, namely PKK mothers, posyandu cadres, and PTM cadres, with a target of 100 people. Counseling activities are carried out through online seminars using the Zoom meeting media. The counseling was conducted on Sunday, August 1, 2021, from 09.00 to 11.30 WIB, starting with the provision of material on emergency management of the gastrointestinal system, pulmonary system, and cardiovascular system during the Covid-19 pandemic and on the management of self-isolation at home during the Covid-19 pandemic. The activity was continued with a question and answer session from the participants and ended with giving door prizes for the counseling participants.

## **DISCUSSION**

The results of community service activities regarding emergency management of the gastrointestinal system, pulmonary system, and cardiovascular system in the Covid-19 pandemic condition and regarding the management of self-isolation at home in the Covid-19 pandemic conditions were participants who had good knowledge (91%). However, a few participants had a positive attitude (60%) and good behavior towards emergency management in patients with cardiovascular, pulmonary, or gastrointestinal disease (52%). Previous research in Indonesia on the description of public knowledge about covid-19 and community behavior during the covid-19 pandemic with 150 respondents found almost the same results, namely that most of the respondents (70%) had good knowledge (Yanti, 2020). In line with Irawan (2020) research that 69.8% of respondents have a good level of knowledge about COVID-19. Similar results were also found in a study conducted in Ethiopia on 404 respondents, which showed that most respondents had good knowledge about the transmission and symptoms of COVID-19 (Molla, 2021).

Patients with three or more comorbidities are at up to 29 times higher risk of dying when infected with COVID-19 than those without comorbidities (Communication Team of the Corona Virus Disease Handling Committee, 2021).

In line with this, if there are respiratory symptoms, the risk of mortality will increase 6.38 times higher, history of comorbid hypertension is 10.59, history of COPD is 7.84, history of DM is 7.05 times compared to patients who do not have comorbidities (Drew & Adisasmita, 2021). Patients with a history of DM have a compromised immune system due to chronic hyperglycemia and impaired immune modulation. Studies by Guan et al. and Mehra et al. found that a history of COPD increased mortality by 2.68 (1.42 – 5.05) and 2.82 (1.92 – 4.14), respectively. It is because the condition of the lungs that already have inflammation and chronic obstruction will worsen the condition of patients infected with COVID-19. (Drew & Adisasmita, 2021).



It is very important to provide education about handling emergency conditions experienced by Covid patients with comorbidities for the community so that they can be given immediate help and immediately taken to the nearest hospital. This activity provides information about what actions to take if a family member who is self-isolating at home experiences symptoms that indicate a heart, lung, and digestive emergency. If people have good knowledge, then their attitudes and behavior will be good too. It follows the theory put forward by Notoatmodjo. The behavior displayed by the respondent is a response or reaction to a stimulus (stimulus from outside. In this case, it is knowledge about Covid-19. A similar statement was put forward by Novita et al. who stated that knowledge plays an important role in the formation of trust, which will help shape perceptions of reality. These perceptions provide the basis for decision making and determine behavior towards certain objects (Susiani & Rani, 2021)

### **CONCLUSION**

Based on the activities that have been carried out and the results of scientific studies, it can be concluded that:

1. The knowledge of family members strongly influences the treatment of patients suffering from COVID-19 at home in caring for patients.
2. Support from family has a very important role for COVID-19 sufferers who are undergoing independent isolation at home to control their illness.
3. The information about emergency management of the gastrointestinal, cardiovascular and pulmonary systems when self-isolating at home for people with COVID-19 is very beneficial for the community. Especially for families in implementing it in daily life in the future during this pandemic.
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