



Factors Affecting Nutritional Adequacy During Self-Quarantine For People and Patients Under Monitoring In The Gunung Sugih Health Center Working Area, Central Lampung

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Abstract Coronavirus disease 2019 (COVID-19) is a new type of disease that has never been found before in humans. The virus that causes COVID-19 is known as Sars-CoV-2. This coronavirus is zoonotic, which means it can be transmitted between animals and humans. Based on data related to People and patients under monitoring, in Lampung province generally has an increasing trend in the number of cases. Population in this study were all COVID 19 Surveillance Teams in Gunung Sugih. The subjects of this study were COVID 19 Surveillance Teams. The determination of the sample uses non-random sampling until the data is saturated, based on information obtained previously, the number of samples determined in this qualitative research is 5 people. The results stated that all respondents agreed that nutrition is important in the body's immunity, besides that the respondents said there were no problems in accessing food intake. Family is important in the implementation of food security during quarantine.

Keywords : COVID 19, Nutritional Adequacy, People Under Monitoring, Patients Under Monitoring

INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is a new type of disease that has never been identified before in humans. The virus that causes COVID-19 is called Sars-CoV-2. Coronaviruses are zoonotic (transmitted between animals and humans)[1]. Current research shows that the homology between COVID-19 and the bat-SARS coronavirus DNA is characterized by more than 85% similarity. When cultured in vitro, COVID-19 can be found in human respiratory epithelial cells after 96 hours. Meanwhile, it takes about 6 days to isolate and culture vero E6 and Huh-7 cell lines [2].

A Monitoring Person is an individual who has a fever above 38 degrees Celsius or has a history of fever, as well as respiratory symptoms such as flu, sore throat, and cough, without

other obvious causes based on reliable clinical features. In addition, within 14 days prior to the onset of symptoms, the person meets one of the following criteria : a) Has a history of traveling or living abroad that reports local transmission; b) Has a history or living in a local transmission area in Indonesia. Patients Under Monitoring are people who have symptoms of fever (>38 degrees Celsius) or a history of fever, acute respiratory infections and mild to severe Pnumonia and have a history of travel to infected countries or contact with people confirmed positive for COVID-19 in the last 14 days. Central Lampung is one of the districts / cities that has a large area in Lampung Province. In addition, many residents work migrating outside the city or abroad.

Nutrition is very important for health, especially during the Covid-19 pandemic. Limited access, during the quarantine period, to fresh food can interfere with the fulfillment of a healthy and varied diet. This could potentially lead to increased consumption of processed foods, which tend to be high in fat, sugar and salt. However, even with limited ingredients, one can continue to consume a nutritionally balanced diet to support good health. The pandemic also poses problems for food security and food access in every country. This is directly related to household food budgets, crop prices and increasing food insecurity [3]. Food security for COVID 19 patients and those in quarantine needs to be very concerned, not only for those with low income but also for vulnerable groups such as the number of family members, the number of young family members, and families who do not have their own homes [4] . Problems will be seen for households that do not have a household food procurement system. A common problem is the inability to consume enough fruits and vegetables. This can further impact the lack of adequate intake of immune-boosting vitamins [5]. So it is important to provide socialization about the importance of fruit and vegetable consumption which is a nutritious food. This activity is usually carried out by volunteers or COVID 19 health workers [6].

The relationship between nutrition and COVID 19 disease has been shown to be very important throughout all phases of disease, especially in people at risk of poor prognosis, including elderly, malnourished and obese patients. Malnutrition can be explained to be the result of a poor immune system. Thus, prolonged stays in the Intensive Care Unit (ICU) can exacerbate malnutrition and decrease muscle function. These aspects, in turn, can exacerbate malnutrition and contribute to slow recovery, loss of independence in daily life, depression, disability, and generally to a reduced quality of life after discharge from the ICU [7].

The purpose of this study was to determine the factors that influence the fulfillment of nutrition during the quarantine period for people and patients under monitoring in Gunung Sugih, Central Lampung.

SUBJECT AND METHOD

This research uses an exploratory qualitative method. The population in this study were all COVID 19 Surveillance Teams in Gunung Sugih. In qualitative research, using descriptive methods, researchers try to explore the determinant factors that affect nutritional fulfillment during quarantine. The time of this research is 6 months, from May to October 2020. This research was conducted in Gunung Sugih Region, Central Lampung, by selecting the capital area of Central Lampung Regency. Data analysis was carried out simultaneously with the data collection process, making interpretations and writing reports.

The case population in this study were all people and patients under monitoring supervisory officers in Gunung Sugih. The subjects of this study were people and patients under monitoring supervisors. Determination of the sample using non-random sampling until the data is saturated, based on information obtained previously, the number of samples is determined if the data taken is saturated.

Researchers explained to respondents about informed consent orally or in writing. Researchers will keep the respondent's personal identity confidential and the data obtained is only used for research purposes. The instrument used in this research is a qualitative research instrument. This instrument contains questions used in an In-depth Interview via a device.

The flow of this research is that starting from the preparation and submission of proposals, obtaining research permits, coordinating with the Gunung Sugih Health Center, looking for intended subjects / informants, in-depth interviews with respondents, coding and triangulation processes, categorization and data analysis, interpretation of results and finally the preparation of results and discussions.

RESULTS

Data collection by informants was carried out using the depth interview method using an instrument on google form, with several question items related to nutritional fulfillment, namely regarding quarantine monitoring data in the form of supervision in fulfilling nutrition during quarantine, access to food, comorbidities, certainty of food safety, and environmental response.

Monitoring is carried out by midwives who are from the regional survey team to conduct monitoring. The purpose of this activity is to ensure conditions during quarantine, especially adequate nutritional intake. From the results of interviews assisted by google form media (5 respondent) , it can be seen that all respondents carry out monitoring. This is a form of duty from the surveillance team which will coordinate with the Gunug Sugih Health Center surveillance team and the Central Lampung District Health Office.

Nutritional fulfillment or food intake

In the question regarding how volunteers ensure the nutritional fulfillment of people included in the people and patients under monitoring, officers have various ways to ensure, including using communication tools or asking neighbors and family for help.

Respondent WKN

"...to make sure I usually call the family or WhatsApp..."

Respondent ED

"...for me, I monitor the family or neighbors who feed the ODP or PDP..."

Nutrition in Immunity Enhancement

The next question regarding the attitudes of respondents was about nutrition that can affect the improvement of the body's immunity. All five respondents mentioned that nutrition can increase body immunity. So the respondents believe that fulfilling adequate nutrition can increase one's immunity.

Respondent O

"..... is very helpful, the right choice of nutrition during quarantine is a boost to endurance...."

Food Access and Food Safety

Access to food is important in fulfilling nutritional needs. The role of family and the environment is also important in preparing or providing food during quarantine. All respondents answered that people who are included in people and patients under monitoring are assisted by their families or closest people in accessing food.

Respondent O

"...family or neighbors cook food and then put it in front of the house for people in quarantine to take...."

In the next question on food safety assurance, respondents answered that there are various ways to see food safety/food hygiene in the family. Promotive actions are carried out by using electronic media such as smartphone applications or communicating with their closest family.

Respondent D

"..... the one who cooks is the family. So we can see the process starting from washing and cooking for the patient's needs..."

DISCUSSION

From the results of the interviews, all respondents monitored the people and patients under monitoring. This is a form of duty from the surveillance team which will coordinate with the Gunug Sugih Health Center surveillance team and the Central Lampung District Health Office. Monitoring activities using telephones or smartphones for safety and feasibility in improving good relationships with patients [8]. People who are included in the people under monitoring are monitored for 14 days by primary health care workers in coordination with the local health office [1]. Surveillance is ongoing monitoring of at-risk groups. Meanwhile, quarantine is the restriction of movement of a person or group of people in an area, including areas suspected of being affected by disease or contamination, to prevent the potential spread of disease or contamination. Surveillance activities are an integral part of quarantine, during the quarantine period, surveillance is carried out to monitor changes in the condition of a person or group of people. Vigilance activities such as surveillance and early warning activities for Covid 19 based on the provisions of the preparedness guidelines by the Ministry of Health of the Republic of Indonesia [9].

Every person in the people and patients under monitoring categories has someone whose job it is to ensure or assist in their food intake. All respondents answered that those who help people in people and patients under monitoring to fulfill their nutritional needs are their close family members. The Covid-19 pandemic has brought changes to our daily lives. Good nutritional intake is essential before, during and after infection. Infection causes the body to experience fever, which requires additional energy and nutrients. Therefore, it is important to maintain a healthy diet during the pandemic. While there are no foods or supplements that can prevent COVID-19 infection, maintaining a nutritionally balanced diet is necessary to strengthen the immune system. [10].

All respondents mentioned that nutrients can increase body immunity. So respondents believe that fulfilling adequate nutrition can increase one's immunity. Consumption of good nutritious food is essential in building a strong immune system. Good nutrition builds the body's protection against diseases such as flu and other health problems including arthritis, allergies, and more. Although food is not a complete antidote to cold infections, with good nutrition the immune system will be more robust so that it will provide extra protection for the body [11]. Micronutrients play an important role in maintaining immunity. Micronutrients that play a role include vitamins (A, B, C, D, and E) folic acid, zinc, iron, copper and selenium to boost the immune response [12].

All respondents answered that people who are included in people and patients under monitoring are assisted by their families or closest people in accessing food. Environmental care for people under quarantine can fulfill their nutritional needs so that it can indirectly help in improving the immune system. Aspects of purchasing power, food production, food transfers/assistance in the form of cash or goods from abroad will affect household food access. Food that has been accessed by households or individuals must be in accordance with nutritional rules/norms both quantitatively and qualitatively. During lockdowns, the food sector is the most affected, and the most affected are the poor and isolated areas. the

agriculture and aquaculture sector at the end of 2020 showed a very significant decline and affected millions of people in the world [13].

The family is the closest person in ensuring the food safety of people included in the people and patients under monitoring. Food safety is important to ensure that the food consumed does not have a negative impact on health after consuming it, such as food poisoning or food contamination. It is important to emphasize how to manage the risk of spreading this virus in relation to food and potential approaches to reducing contamination [14]. The Covid 19 pandemic increased food safety knowledge and behavior in the Chinese population. This makes people care about information related to food safety [15].

CONCLUSION

The study was participated by five respondents who were the survey team at Gunung Sugih Health Center, Central Lampung. Monitoring was conducted by the survey team to ensure the condition of people included in the people and patients under monitoring, especially their nutritional fulfillment. In fulfilling their nutrition, the surveillance team was assisted by the family by confirming it via smartphone (through the application). All respondents agreed that nutrition is a factor that affects the body's immunity and there were no problems with access to food. Family is important in ensuring food safety during quarantine for people and patients under monitoring.

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