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FACTORS ASSOCIATED WITH LOW PARTICIPATION OF COVID-19 VACCINATION PROGRAM IN THE ELDERLY, IN KARANG ANYAR HEALTH CENTER, SOUTH LAMPUNG: A QUALITATIVE STUDY

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ABSTRACT

Background: Older adults are more likely to get very sick from COVID-19. Getting very sicks means that older adults with COVID-19 might need hospitalization, intensive care, or a ventilator to help them breathe, or they might even die. According to World Health Organization, older people should be prioritized for vaccination. However, previous studies have reported COVID-19 vaccination hesitancy and low participation in older adults. This study aimed to determine factors associated with low participation in COVID-19 vaccination among the elderly at Karang Anyar Health Center, South Lampung.
Subjects and Method: This was a qualitative study with phenomenological approach conducted at Karang Anyar Health Center, South Lampung, from June to July 2021. A sample of 15 elderly was selected by purposive sampling. The data were collected by in-depth interview and analyzed descriptively.
Results: The majority of subjects were 66-70 years of age (53.33%) and female (60%). The factors associated with low participation in COVID-19 vaccination included: (1) Lack of knowledge, attitudes and behavior of the elderly; (2) Lack of support from their families for COVID-19 vaccination; and (3) Weak implementation of the COVID-19 vaccination for the elderly.
Conclusion: The factors associated with low participation in COVID-19 vaccination include lack of knowledge, attitudes and behavior of the elderly and family, as well as weak implementation of the COVID-19 vaccination program for the elderly.

Keywords: low participation, vaccination, COVID-19, elderly

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BACKGROUND

Corona Virus Disease 2019 (COVID-19) as a non-natural disaster. Since the announcement of the first confirmed case in March 2020, within a period of one month, all provinces have reported confirmation cases. The spread of COVID-19 has not only occurred in the Special Capital Region of Jakarta and other densely populated cities, but has spread to rural areas in remote areas. As of July 21, 2021, a total of 2,983,830 confirmed cases of COVID-19 have been reported in Indonesia and a total of 77,583 people have died (Ministry of Health of the Republic of Indonesia, 2021a). Meanwhile, Lampung Province recorded 29,519 confirmed cases with 1,670 deaths as of 21 July 2021 (Covid-19 Task Force, 2021a). The Karang Anyar Health Center recorded that from January 2021 to June 2021 there were a total of 158 confirmed cases, with PCR examinations totaling 122 cases and 36 cases with antigen testing

with 3 deaths (Karang Anyar Health Center, 2021).

The COVID-19 pandemic poses a major challenge in efforts to improve the health status of the Indonesian people and has an impact on the Indonesian health system as seen from the decline in performance in several health programs. This is due to the priority in dealing with the COVID-19 pandemic as well as the concerns of the public and officers regarding the transmission of COVID-19. In some areas, the COVID-19 pandemic situation has even resulted in temporary closures and/or delays of health services, especially at posyandu and puskesmas. Therefore, it is necessary to immediately intervene not only in terms of implementing health protocols but also other effective interventions to break the chain of disease transmission, namely through vaccination efforts (*Kemenkes RI*, 2021). For years, vaccines have been proven to reduce the incidence of infectious diseases through the mechanism of the human body's immunity (Mortellaro & Ricciardi, 2011).

The COVID-19 vaccine was developed to assist the formation of individual body immunity so that the administration of the COVID-19 vaccine is expected to accelerate the formation of group immunity (herd immunity) which will have an impact on reducing the number of infected cases (WHO, 2020). Efforts to develop an ideal vaccine for the prevention of SARS-CoV-2 infection with various platforms have been carried out, namely inactivated virus vaccines, live attenuated virus vaccines, virus vector vaccines, nucleic acid vaccines, and virus-like vaccines), and protein sub-unit vaccine (*Kemenkes RI*, 2021a).

The COVID-19 vaccination aims to reduce the transmission/ transmission of COVID-19, reduce morbidity and mortality due to COVID-19, achieve herd immunity and protect the community from COVID-19 in order to remain socially and economically productive. Herd immunity can only be formed if vaccination coverage is high and evenly distributed throughout the region. Prevention efforts through the provision of vaccination programs if assessed from an economic point of view, will be much more cost-effective, when compared to treatment efforts (Ministry of Health of the Republic of Indonesia, 2021a).

The COVID-19 vaccination program in Indonesia began on January 13, 2021. For the first batch, the vaccine was given to health workers, public officials, and the elderly. In the second wave, the targets of vaccination are vulnerable groups and the general public. The government targets 181.5 million people to have received the COVID-19 vaccination by March 2022 (Ministry of Health of the Republic of Indonesia, 2021b). To meet the targets that have been set, the Indonesian government is trying to ensure the availability of vaccines. The types of vaccines that have been and will be used in Indonesia are AstraZeneca, Moderna, Pfizer, Sinopharm and Sinovac (*Kemenkes RI*, 2020a). The five types of vaccines have different efficacy based on clinical trials that have been carried out.

The World Health Organization (WHO) explained that vaccine performance can be seen from three

measurements, namely through the efficacy, effectiveness, and impact of vaccines (WHO, 2021). Vaccine efficacy measures the reduced risk of infection occurring in vaccinated individuals in controlled situations. These efficacy data were obtained from a randomized control trial. While vaccine effectiveness measures the reduction in the risk of infection occurring in vaccinated individuals related to the implementation of vaccination in the community or in the real world using observational studies. Furthermore, the impact of vaccines is to reduce the risk of infection or disease in a population where some of the people have been vaccinated.

Studies showing the effectiveness of vaccines in several countries have been carried out (Amit et al., 2021; Dagan et al., 2021; Hall et al., 2021). However, data is not yet available showing how the impact of the vaccine has on the Indonesian people, especially with regard to the five types of vaccines used. A study measuring the impact of vaccines on the population was carried out in the UK using two types of vaccines namely AstraZeneca and Pfizer (Pritchard et al., 2021).

The Indonesian government until April 2021 targets that 40.3 million people have been vaccinated with the complete dose (twice the injection dose). Three types of vaccines namely Sinovac, AstraZeneca and Sinopharm have been used in Indonesia, but the achievement of vaccine delivery until the end of April 2021 only reached 19% of the target (Covid-19 Task Force, 2021b). In addition to the low speed of vaccine delivery, another thing that causes the low coverage of the COVID-

19 vaccine is the lack of public acceptance of the vaccine itself. Harapan et al., found that vaccine acceptance would be higher in high-efficacy vaccines (Harapan et al., 2020). In the first stage, the type of vaccine that is widely used is Sinovac which is considered to have low efficacy. If we refer to the performance of vaccines according to WHO, we need information on how the vaccine impacts at the community level.

The elderly (elderly) are an age group that is vulnerable to COVID-19 transmission and morbidity, so the government includes the elderly in the priority group for COVID-19 vaccination recipients. As of July 21, 2021, the vaccination achievement in Indonesia was 20.58% for dose 1 and 8.03% for dose 2. Meanwhile, the vaccination achievement for Lampung Province for dose 1 was 8.76% and dose 2 was 4.11%. In the elderly group, the national vaccination achievement was 21.90% for dose 1 and 13.86% for dose 2. The vaccination achievement for the elderly group in Lampung Province was still very low, namely 6.77% for dose 1 and 4.31% for dose 2. Based on data from the Karang Anyar Health Center it is known that the achievement of COVID vaccination -19 in the elderly group in the work area amounted to 187 people, still low. This study aims to determine the factors associated with the low participation of COVID-19 vaccination in the elderly at the Karang Anyar Health Center, South Lampung.

SUBJECTS AND METHOD
1. Study Design
This was an exploratory qualitative study with a phenomenological

approach. This qualitative research was conducted using a descriptive phenomenological method, the researchers tried to explore the meaning and significance and tried to explore the phenomenon of the factors that caused the low coverage of COVID-19 vaccination in the elderly in the working area of the Karang Anyar Health Center, South Lampung.

This study was conducted in the Karang Anyar Health Center, South Lampung, fom June to July 2021.

2. Study informants

The selection of informants in this study used purposive sampling, the technique of determining samoel by considering certain criteria.

Inclusion criteria:

1. Elderly >60 years old
2. Can communicate fluently
3. Do not have impaired cognitive function

The number of informants selected in this study were 15 elderly people.

3. Data Analysis

The instrument used is a qualitative research instrument, namely an in-depth interview guide that contains questions used in data collection, field notes and a recording device. The process of collecting data in this study was carried out by in-depth interviews with participants/informants, namely the elderly (age group > 60 years).

Data analysis is carried out simultaneously with the process of collecting data, making interpretations and writing reports. Data analysis in qualitative research is an activity that is carried out continuously during the research, starting from collecting data to the stage of writing reports. Activities in the analysis include: data reduction (data reduction), data presentation (data display) as well as drawing conclusions and verification (conclusion drawing or verification) (Afrizal, 2015).

Validity and reliability tests are carried out by a triangulation process and member checking. Triangulation technique with source and theory triangulation. Source triangulation was carried out by interviewing the village head (Kades), health cadres, family members of informants, and health officers/program holders at the Karang Anyar Health Center.

RESULTS

Sociodemographic characteristics of informants

Characteristics of 15 elderly people, the majority of informants are 66-70 years old, 8 people (53.33%), 9 people (60%), female, most of the informants have no partner (widower or widow) as many as 11 people (73.33%, most of the informants live with their children/families, as many as 12 people (80%) (Table 1).

Based on the thematic analysis of the results of in-depth interviews with the elderly group, three themes were identified related to the factors causing the low coverage of COVID-19 vaccination for the elderly group in the Karang Anyar Health Center, South Lampung, namely the knowledge of the elderly and their families regarding the COVID-19 vaccination program, attitude and behavior of the elderly. and families regarding the COVID-19 vaccination, and the support system in the implementation of the COVID-19 vaccination for the elderly.

Table 1. Sociodemographic characteristics of informants

Characteristics	Category	Frequency (n)	Percentage (%)
Age	60-65 years	5	33.33
	66-70 years	8	53.33
	71-75 years	2	13.33
Gender	Male	6	40
	Female	9	60
Marital Status	Married	4	26.67
	Widow/widower	11	73.33
Domicile	Home alone apart from children	3	20
	Living with children	12	80

1. Knowledge of the elderly and families about the COVID-19 vaccination program

Knowledge of the elderly and their families regarding the COVID-19 vaccination program for the elderly is still not good. Almost all of the informants already know about the definition and symptoms of the COVID-19 infectious disease, but the prevention of COVID-19 is only limited to 3M, namely wearing masks, washing hands and keeping a distance, and the informants' knowledge about vaccination is still not good. According to informants, COVID is a disease caused by a corona virus that is transmitted from person-to-person contact with the most commonly recognized symptoms being fever, cough and shortness of breath. According to the informant, prevention of COVID-19 based on interview results is still limited to 3M, namely wearing masks, washing hands and maintaining distance. Respondents' knowledge about vaccination is not good, namely the vaccination process is to inject the virus into the body with the aim of increasing immunity and preventing.

2. Attitudes and behavior towards the COVID-19 vaccination program

The attitude and behavior of the elderly to carry out COVID-19 vaccination is not good. They are still reluctant to participate in vaccinations because they are still afraid of being injected, they don't need to be vaccinated because they are old and vaccines will cause COVID-19 and other diseases or aggravate existing diseases to cause death. In addition, it was also known that the informant's family members, namely the informant's children or grandchildren, also did not allow the informant to carry out the COVID-19 vaccination for fear of causing COVID-19 disease, other diseases and even death. In addition, the behavior of other families related to the behavior of treating and preventing disease complications that exist in the informants is also not good. It is the fact the family does not want or is reluctant to take their parents or grandparents to seek treatment at the Puskesmas, doctor or other health facilities on the grounds that they will later be sentenced to suffer from COVID-19 whatever the disease.

3. Family support in the implementation of COVID-19 vaccination

Support in the implementation of the COVID-19 vaccination program for the elderly in the working area of the Karang Anyar Health Center is also still not good. The support system in question is lack of family support (not allowed, no one can deliver vaccines at the Puskesmas), lack of support from community leaders or local government officials, limited access and delivery of correct information related to COVID-19 vaccination, availability of vaccines in hospitals. Karang Anyar Health Center which is still low, the location of the COVID-19 vaccination is still limited to the Puskesmas so that it cannot reach the elderly whose homes are far from the Puskesmas, the limitations of vaccination services by the Puskesmas, and the process of selecting COVID-19 vaccination targets for the elderly who are still lacking.

DISCUSSION

According to Law Number 13 of 1998, an elderly person is someone who has reached the age of 60 (sixty) years and over. The elderly population continues to experience an increase in line with progress in the health sector, which is marked by an increase in life expectancy and a decrease in mortality. These demographic developments can have an impact in the health, economic, and social fields. For this reason, data related to aging are needed as mapping material and policy strategies so that the growth of the elderly population becomes a potential that helps build the nation (BPS, 2020).

Most of the informants in this study were young elderly, aged 60-69 years and female. This is in accordance with BPS data (2020), which states that there are more female elderly than male elderly (52.29% compared to 47.71%). When viewed from the age group, the percentage of the elderly in Indonesia is mostly filled by the young elderly (age group 60-69 years) with a percentage of 64.29%, followed by the middle elderly (age group 70-79 years) at 27.23 percent and finally the elderly. (80+ years age group) by 8.4%. The Ministry of Health of the Republic of Indonesia (2016) also states that the elderly population is mostly women, which indicates that the highest life expectancy is elderly women.

Based on the results of in-depth interviews with informants, it is known that the knowledge of elderly informants about COVID-19 and vaccination is still lacking. According to the Indonesian Ministry of Health (2020c), COVID-19 is an infectious disease of the Coronavirus, a new type of disease that has never been previously identified in humans. The virus that causes COVID-19 is called Sars-CoV-2. Corona virus is zoonotic (transmitted between animals and humans).

Research says that SARS was transmitted from civet cats to humans and MERS from camels to humans. Meanwhile, the animal that is the source of the transmission of COVID-19 is still unknown. Common signs and symptoms of COVID-19 infection include symptoms of acute respiratory distress such as fever, cough and shortness of breath. The average incubation period is 5-6 days with the longest incubation period being 14 days. In

severe cases of COVID-19 it can cause pneumonia, acute respiratory syndrome, kidney failure, and even death. The clinical signs and symptoms reported in the majority of cases were fever, with some cases having difficulty breathing, and X-rays showing extensive pneumonia infiltrates in both lungs.

The informant's knowledge about preventing the transmission of COVID-19 is also still not good, the informant only knows 3M, namely wearing masks, washing hands with soap and keeping a distance. The informants did not know in more detail about 3M, for example, regarding what types of masks can be used, when and how to wash hands using soap properly and how to keep a distance. In addition, informants do not know that the prevention of COVID-19 transmission is at least 5 M, namely wearing masks, washing hands with soap, maintaining a minimum distance of 1 meter, staying away from crowds and reducing mobility or at home (Kemenkes RI, 2020c).

Informants' knowledge about COVID-19 vaccination is also not good. According to the informant, the vaccination process is to inject the virus into the body with the aim of increasing immunity and preventing it. According to the Ministry of Health of the Republic of Indonesia (2021b) vaccination is a process in the body, where a person becomes immune or protected from a disease so that if one day he is exposed to the disease he will not get sick or only experience mild illness, usually by giving the vaccine. Vaccines are biological products containing antigens in the form of microorganisms or parts thereof or substances they produce which have been processed in such a way that they are safe, which when given to a person will cause active specific immunity against certain diseases. Vaccines are not drugs, they encourage the formation of specific immunity in the body to avoid contracting or possibly getting seriously ill. As long as there is no definitive cure for COVID-19, a safe and effective COVID-19 vaccine is accompanied by preventive behavior. Vaccination is not only aimed at breaking the chain of disease transmission and stopping the outbreak, but also in the long term to eliminate and even eradicate the disease itself.

The attitude and behavior of the elderly to carry out COVID-19 vaccination is not good. They are still reluctant to participate in vaccination because they are still afraid of being injected. This fear or concern can arise because of incorrect/hoax information related to the procedures and side effects of vaccination and the safety of the COVID-19 vaccine itself. According to the Indonesian Ministry of Health (2021b) mass-produced vaccines have gone through a long process and must meet the main requirements, namely: Safe, Effective, Stable and Efficient in terms of cost. Aspects of vaccine safety are ensured through several stages of clinical trials that are correct and uphold the rules of science, science and health standards. The Indonesian government only provides COVID-19 vaccines that are proven safe and have passed clinical trials, and have received Emergency Use of Authorization (EUA) from BPOM.

Informants do not want to be vaccinated because they think that if vaccinated it will cause COVID-19 and

other diseases or worsen existing diseases to cause death. The COVID-19 vaccine used worldwide is effective in preventing severe illness and death from the coronavirus, but some people can still become infected after being vaccinated. With cases of infection after being vaccinated, health experts say that the vaccine will help reduce the severity of the disease. Experts are also trying to find answers whether cases of COVID-19 after being vaccinated can cause Long COVID. Some studies estimate that about 30 percent of unvaccinated COVID-19 patients experience Long COVID symptoms such as shortness of breath, fatigue, difficulty concentrating, insomnia, and brain fog. Similar symptoms can also develop after other viral infections.

Other family behaviors related to the behavior of treating and preventing disease complications that exist in the informants are also not good, namely the family does not want or is reluctant to take their parents or grandparents for treatment to the Puskesmas, doctor or other health facilities on the grounds that later they will be sentenced as COVID-19 sufferers regardless of the disease. This is because the informants and their families received false/hoax information regarding the COVID-19 vaccination. According to UNICEF (2021) there are many hoaxes circulating in the community that refuse to be vaccinated because being told the COVID-19 vaccine causes the recipient to die within three years of the vaccine being given. Some people who believed this information have now died because they did not want to be vaccinated and did not apply health protocols and the family members left behind began to realize that the hoax had taken their loved ones. This family behavior is one of the main things that support the behavior of informants, because most of the informants live with their families, namely children, daughters-in-law and grandchildren, so that most of the informants' behavior is also influenced by the behavior of other family members.

The support system in the implementation of the COVID-19 vaccination program for the elderly in the working area of the Karang Anyar Health Center is also still not good. The support system in question is lack of family support (not allowed, no one can deliver vaccines at the Puskesmas). Family support for the elderly is very important, because without family support, almost all elderly activities outside the home cannot be done independently. According to Mulyati (2015), family support is needed so that the elderly feel that their lives are useful. Especially for the elderly who live with family children, they must pay attention and encourage the elderly to be active in activities that are in the environment where the elderly live. Families are also expected to give more attention to the elderly because the elderly also want a sense of love and care, not only the material provided. Families are expected to provide good information to the elderly who live alone. According to Notoadmojo (2010), there is a relationship between the family and the independence of the elderly with the help and assistance of the family, the elderly will be easy to do their independence in daily life because the elderly feel cared for so that they achieve good independence.

The lack of support from community leaders or local government officials in COVID-19 vaccination for the elderly is due to the lack of proper information and binding rules. The location for the implementation of the COVID-19 vaccination is still limited to the health center so that it cannot reach the elderly whose homes are far from the health center, causing the elderly to not be able to participate in the COVID-19 vaccination program, plus elderly family members are reluctant or unable to deliver informants to the Puskesmas to get COVID-19 vaccinations. The limitations of vaccination services by Puskesmas, and the process of selecting COVID-19 vaccination targets for the elderly are still lacking due to the unequal distribution of COVID-19 vaccination services from the central government.

AUTHOR CONTRIBUTION

Dian Isti Angraini is the main writer who chooses topics, processes data and writes articles. Fitria Saftarina as coauthor plays a role in processing and analyzing the data. Bagus pratama as coauthor plays a role in data collection.

CONFLICT OF INTEREST

There is no conflict of interest in this study.

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