

## THE FACTORS ASSOCIATED WITH THE IMPLEMENTATION OF COVID-19 VACCINE 3 AT PUBLIC HEALTH CENTER IN OGAN KOMERING ULU DISTRICT

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### ABSTRACT

**Background:** A new type of Corona virus (Covid-19), also called Severe Acute Respiratory Syndrome Corona Virus 2, was discovered in humans in Wuhan, China. Covid-19 vaccination can form herd immunity in society, thereby reducing morbidity and death rates due to Covid-19. This researcher aims to determine the analysis of factors related to the implementation of the COVID-19 vaccine in Sukanegeri Village, the UPTD Working Area of the Betung Community Health Center, East Oku Regency, in 2023. **Method:** This research design uses analytical observation with a cross-sectional approach. The sample was taken from the total population, namely all people who had received the 2nd COVID-19 vaccine in Sukanegeri village, the UPTD Working Area of the Betung Community Health Center, East Oku Regency, totaling 1,554 people, so the sample size was 90.47 (rounded to 91) respondents. The statistical test used is the chi-square test. **Results:** The results of the bivariate analysis show that, there is a significant relationship between education and the implementation of the 3 covid-19 vaccine with a p value of 0.0005, there is a significant relationship between knowledge and the implementation of the 3 covid-19 vaccine with a p value of 0.000, there is a significant relationship between attitude with the implementation of the 3 covid-19 vaccine with a p value of 0.000, there is a significant relationship between the availability of information and the implementation of the 3 covid-19 vaccine with a p value of 0.001, there is a significant relationship between family support and the implementation of the 3 covid-19 vaccine with a p value of 0.001. **Conclusion:** There is a significant relationship between education, knowledge, attitudes, availability of information, and family support for the COVID-19 vaccine.

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## INTRODUCTION

In 2020, millions of people will fall ill and die from this disease every day. Among confirmed cases, the COVID-19 death rate is around 2.67%. Covid-19 vaccination can form herd immunity in society, thereby reducing the number of morbidity and death consequences of Covid-19 (Director General of the P2P Ministry of Health of the Republic of Indonesia, 2021).

At the beginning of January 2022, there were 4 million (52%) of the world's population who had been fully vaccinated and 4.7 million (60.7%) who had received at least one dose of the COVID-19 vaccine. The latest study reports that the rate of recipients of the COVID-19 vaccine in several countries is 67–69% in the United States, 89% in China, 74%–77% in France, and 55% in Russia. Acceptance of the COVID-19 vaccine in Indonesia has reached 70% for the first dose and 50% for the second dose, and Indonesia is fourth in the world in receiving the number of COVID-19 vaccines (WHO, 2022).

The Indonesian government requires all people to vaccinate three times, namely the first vaccination, the second vaccination, and the booster vaccination. Currently, the achievement of the 1st vaccination is 87.47%, the 2nd vaccination is 73.35%, and the booster vaccination is 28.03%. Based on the South Sumatra Province's recap of the collected data, the third COVID-19 booster program will start on January 12, 2022. Based on the health profile of East OKU Regency in 2022, of the 22 community health centers in East OKU Regency, the one with the lowest number of cases is Betung Community Health Center, which has received the 3rd COVID-19 vaccine for 2.97% of the total target of 16.929%.

According to the health profile data from the Betung Community Health Center, East OKU Regency, there are 12 villages with a target population of 16,320, but only 12,365 have received the third COVID-19 vaccine. In Sukanegeri village, the target number was 1,805, but only 925 (51.2%) had received the third COVID-19 vaccine. Based on an initial survey of 15 people, there were 6 people who had not yet had the 3rd COVID-19 vaccine because someone who had taken the 1st and 2nd vaccines no longer had the 3rd vaccine due to lack of knowledge or because the family did not support them enough to take the 3rd COVID-19 vaccine. 19 (Betung Community Health Center Profile, 2023).

Based on the background above, the researcher aims to conduct research to find out more about the analysis of factors related to the implementation of

the COVID-19 vaccine in Sukanegeri Village, the UPTD Work Area of the Betung Community Health Center, and East OKU Regency in 2023.

## METHOD

This research is quantitative with a cross-sectional approach (Creswell, 2014). Collecting data using a survey using a questionnaire that has been tested for validity and reliability and laboratory tests. The questionnaire asked about the implementation of the COVID-19 vaccine. The population was 1,554 people who had received the second COVID-19 vaccine and were selected using the simple random sampling method. The sample was determined based on the cross-sectional formula with a margin of error of 10% (Ryan, 2013), totaling 90.47 (rounded to 91) respondents. The variables studied include the implementation of the COVID-19 vaccine (a dependent variable), education, knowledge, attitude, availability of information, and family support (an independent variable). Data analysis using bivariate analysis using Chi-Square analysis.

## RESULTS

The results of data analysis are presented in the Table 1 and Table 2 below:

**Table 1.** Frequency Distribution Based on Implementation of the COVID-19 Vaccine

Variables	Frequency (n)	Percentage (%)
Implementation of COVID-19 vaccine 3		
1. No Vaccine	53	58.2
2. Vaccine	38	41.8
Education		
1. Low	53	58.2
2. Tall	38	41.8
Knowledge		
1. Not enough	47	51.6
2. More	44	48.4
Attitude		
1. Not enough	56	61.5
2. More	35	38.5
Availability of Information		
1. Not Available	55	60.4
2. Available	36	39.6
Family Support		
1. Not Support	51	56
2. Supportive	40	44

Based on Table 1, it was found that the implementation of COVID-19 Vaccine 3 was 58.2%. Education, knowledge, attitudes, availability of information, and family support.

**Table 2.** Relationship between Implementation of the COVID-19 Vaccine and Respondent Characteristics

Variables	Vaccine 3: COVID-19				
	Yes		No		<i>p value</i>
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	
Education					
1. Low	40	75.5	13	24.5	0.0005
2. Tall	13	34.2	25	65.8	
Knowledge					
1. Not enough	39	83	8	17	0.0005
2. More	14	31.8	30	68.2	
Attitude					
1. Not enough	45	80.4	11	19.6	0.0005
2. More	8	22.9	27	77.1	
Availability of Information					
1. Not Available	40	72.7	15	27.3	0.001
2. Available	13	36.1	23	63.9	
Family support					
1. Not Supported	38	74.5	13	25.5	0.001
2. Supportive	15	37.5	25	62.5	

Based on Table 2, the results of the chi-square test show that the variables significantly related to the implementation of the COVID-19-3 vaccine are

education, knowledge, attitudes, availability of information, and family support.

## DISCUSSION

The researcher's assumption is based on the research results that the level of education in society is related to the implementation of the COVID-19 vaccine. The proportion of respondents who had low education and were not vaccinated was 40 (75.5%) respondents. This was because the economic factors of the respondents were still very low and made it difficult for respondents to continue school, and respondents always thought that what was the point of having a high education if they had already finished school and would return to the kitchen, work in the fields, or even become traders, so respondents preferred to work rather than go to school. And because the respondent's education is low, respondents tend to have a negative perception of the COVID-19 vaccine. Meanwhile, the proportion of respondents who had higher education and were not vaccinated was 13 (34.2%). This was because respondents were busy at work, which required respondents to go home early in the morning and return late at night, so they did not have time to get vaccinated against COVID-19.

Based on previous research by Zisi Lioni Argista regarding public perceptions of the COVID-19 vaccine in South Sumatra with a *p* value of 0.038, it can be concluded that there is a relationship

between education and public perception of the COVID-19 vaccine in South Sumatra.

The researcher's assumption is based on the research results that the level of knowledge in the community is related to the implementation of the COVID-19 vaccine. The proportion of respondents who lacked knowledge and were not vaccinated was 39 (83.0%). This was because the majority of respondents had low education; some had not completed middle school or high school, and some had not even completed elementary school, so obtaining information was also relatively low. Because their knowledge is low, respondents think that vaccination is only for people who work, which requires them to travel out of town or abroad. Meanwhile, the proportion of respondents whose knowledge was good and who had not been vaccinated was 14 (31.8%). This was because respondents did not believe that COVID-19 existed; they thought that COVID-19 was just a trick by the government for the interests of the state without thinking about it. the people and did not think about the people's economy during COVID-19, and this is what made respondents not want to be vaccinated.

Based on previous research by Dila Novitriawati, Z., regarding Factors that Influence the

Behavior of the COVID-19 Vaccine in the Elderly in the UPTD Working Area of the Small Bridge Health Center, Bengkulu City, It is known that a small percentage of respondents with low knowledge influence have the behavior of having been vaccinated (16.7%), almost all of the respondents with low knowledge influence have the behavior of not having been vaccinated (83.3%). Respondents with high knowledge influence had almost all vaccine behaviors (80.9%). Respondents with a high influence of knowledge had a small number of non-vaccine behaviors (19.1%).

The researcher's assumption is based on the research results that attitudes in society are related to the implementation of the COVID-19 vaccine. The proportion of respondents whose attitude was poor and who were not vaccinated was 45 (80.4%) respondents; this was due to the respondents lack of activeness and willingness to be vaccinated against COVID-19 as well as their lack of knowledge about vaccines. Social and cultural factors in Sukanegeri village The majority of their houses are close to rivers or roads, so people in Sukanegeri village like to play by the river and on the side of the road. Meanwhile, the proportion of respondents who had a good attitude but did not take the vaccine was 8 (22.9%). This was because respondents felt they did not need the COVID-19 vaccine, so their attitude was more indifferent about the importance of vaccine 3. Respondents only knew that vaccine 3 was useless. in everyday life because vaccine 3 is only needed by respondents who have jobs that require them to go out of town or even abroad for their work, whereas in Sukanegeri village most people work as laborers, farmers, and traders, so respondents think that vaccine 3 is not really needed.

Based on previous research by Tri Untari Wulandari regarding the level of knowledge and attitudes of community acceptance of the COVID-19 vaccine in Central Java, there is a p value of 0.001, which means there is a significant relationship with a correlation strength of -0.170, meaning this relationship has a negative direction and the strength of the relationship is very weak.

The researcher's assumption is based on the research results that the availability of information to the public is related to the implementation of the COVID-19 vaccine. The proportion of respondents whose information was not available and who were not vaccinated was 40 (72.7%) respondents. This was due to limited signals in Sukanegeri village, which resulted in respondents not getting enough information so that electronic information about vaccines was less available to respondents, and this

is what created interest. Society is lacking in the three COVID-19 vaccines. And there is a lack of banners and posters in the community's neighborhood or certain places that the community frequently visits. Meanwhile, the proportion of respondents whose information was available but who did not have the vaccine was 13 (36.1%) respondents; this was due to the respondents lack of interest in taking the vaccine. Respondents' interest was the first key for respondents to seek more in-depth information about vaccines. Based on previous research by Dila Novitriawati, Z. regarding Factors that Influence COVID-19 Vaccine Behavior in the Elderly in the UPTD Working Area of the Small Bridge Health Center, Bengkulu City, with a p value of 0.001 ( $P < 0.05$ ),  $H_0$  is rejected. This shows that there is a relationship between the availability of information and the behavior of the COVID-19 vaccine in 34 elderly people in the UPTD working area of the Jembatan Kecil Health Center, Bengkulu City.

The researcher's assumption is based on the research results that family support in the community is related to the implementation of the COVID-19 vaccine. The proportion of respondents whose family did not support them and did not receive the vaccine was 38 (74.5%) respondents; this was due to a lack of information, both from electronic and print media. The majority of people in Sukanegeri village are Komerang people, and the majority of Komerang people treat a man or head of the family as a king, so what a husband orders or says is an order that must be carried out. If a husband does not allow him to be vaccinated, then he must carry it out. Meanwhile, the proportion of respondents whose families supported and did not receive the vaccine was 15 (37.5%) respondents; this was because the respondents' families knew about the side effects after the vaccine, therefore making the respondents' families afraid to get vaccinated. 3. And some families considered that vaccine 3 was not important, and some families also did not believe that COVID-19 existed.

The role of mothers is also closely related to helping prevent the transmission of Covid-19 and the successful implementation of vaccines in their families (Maksuk & Pastari, 2021). Factors that Influence COVID-19 Vaccine Behavior in the Elderly in the UPTD Working Area of the Small Bridge Health Center, Bengkulu City, there is a relationship between family support and COVID-19 vaccine behavior among the elderly in the UPTD work area of the Jembatan Kecil Health Center, Bengkulu City (Patroni et al., 2022).

## CONCLUSION

The implementation vaccine of Covid 19 is influenced by education, knowledge, attitudes, availability of information, and family support. The

family is very helpful in providing support to other family members for the successful implementation of the Covid vaccine.

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