

Research Article

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## The Relationship between Perception and Community Willingness in COVID-19 Vaccination in the Working Area in the Nambo Health Center, Kendari City

Toto Surianto S.<sup>1</sup>, Noviati<sup>2</sup>, La Djabo Buton<sup>3</sup>, Ahmad Mudatsir<sup>4</sup>

<sup>1,2,3,4</sup>Mandala Waluya University, Indonesia

**Corresponding Author :**

Toto Surianto S., Mandala Waluya University, Indonesia,

E-mail : toto.surianto050589@gmail.com, phone : 081241904903

### Abstract

**Objectives:** The implementation of vaccination is followed by the issuance of various vaccination policies to optimize the achievement of vaccination targets at the national, provincial, and district or city levels. At Nambo Health Center, the number of vaccinations on March 30, 2022, has been recorded as many as 586 people, or 78.13% of the total 1st, 2nd, and 3rd vaccinations. This shows that vaccination achievements are still far from the vaccination target.

**Methods:** As many as 750 people, this condition is due to controversy in the community regarding vaccinations, both related to safety, side effects, and the halalness of vaccines, as well as misinformation obtained by the public, resulting in negative perceptions of the COVID-19 vaccine, which makes them hesitant when they are vaccinated against COVID-19. This type of research is descriptive analytic with a cross-sectional study design. The population in this study was 8,327 people, with a total sample of 99 people using the Cluster Random Sampling technique. Data was analyzed using the chi-square test.

**Results:** The results of the study found that there was a relationship between perception and public willingness to vaccinate against COVID-19 in the working area of the Nambo Health Center,  $X^2$  value = 8.523.

**Conclusion :** There is a fairly strong relationship between family support and vaccine availability and there is a weak relationship between public perception and vaccine availability in the working area of the Nambo Health Center. It is hoped that health workers in the working area of the Nambo Health Center Will continue to explain to the public that it is important to follow the COVID-19 vaccination. The dose of COVID-19 vaccination has been properly regulated to form an immune system for every community.

**Keywords :** COVID-19, Vaccine, Public, Perception

## INTRODUCTION

COVID-19 is still a health problem in the world. Based on WHO data released on March 18, 2022, it showed that there were 464,809,377 confirmed cases of COVID-19 in the world, including 6,062,536 reported deaths and the United States had the highest number of confirmed cases in the world, namely 78,932,322 (WHO,2022). Furthermore, data on Covid-19 in Indonesia on March 19, 2022, recorded as many as 5,956,561 confirmed cases of positive Covid-19, as many as 5,573,228 recovered, and as many as 153,599 died (Covid-19 Handling Task Force, 2022). Then the Covid-19 data in Southeast Sulawesi Province based on March 28, 2022, showed that there were 25,490 confirmed cases of positive Covid-19, as many as 24,694 recovered, and as many as 561 died. (Monitoring of COVID-19 Cases in Southeast Sulawesi Province, 2022).

The Indonesian state, in dealing with the COVID-19 pandemic, has made various efforts to protect the health of Indonesian citizens, including the implementation of vaccinations starting on January 13, 2021 (Gandryani and Hadi, 2021). Vaccination implementation has been regulated in various regulations, including Presidential Regulation Number 99 of 2020 concerning Vaccine Procurement and Vaccination Implementation in the Context of the Covid-2019 Pandemic, which has been amended by Presidential Regulation Number 14 of 2021, Minister of Health Regulation Number 28 of 2020 concerning Implementation of Vaccine Procurement in the Framework of the Covid-2019 Pandemic Management, which has been amended by Regulation of the Minister of Health Number 79 of 2020, Regulation of the Minister of Health Number 10 of 2021 concerning the Implementation of Vaccination in the Context of Managing the Covid-19 Pandemic, and Decree of the Minister of Health Number HK.01.07/Menkes/4638/2021 Regarding the Technical Guidelines for the Implementation

of Vaccination in the Context of Combating the Covid-2019 Pandemic. These various regulations were issued in order to optimize the implementation of vaccination in the community.

Vaccination is the provision of vaccines that are specifically given in order to actively generate or increase a person's immunity against a disease, so that if one day they are exposed to the disease, they will not get sick or only experience mild illness and will not become a source of transmission (Permenkes No. 10 of 2021). By giving vaccines to the public, it is hoped that they can train the body to know, fight, and be immune to the causes of disease, viruses, or bacteria. Vaccines are not drugs, but vaccines can encourage the development of special immunity for COVID-19 disease so that they are free from this virus (Fitriyana, 2021). According to Article 4 of the Minister of Health Regulation No. 10 of 2021, the implementation of the 2019 Covid-vaccination aims to: a. reduce the transmission/contagion of Covid-2019; b. reduce morbidity and mortality due to Covid-2019; c. achieve herd immunity in society; and D. protect the community from Covid-2019 in order to remain socially and economically productive. Based on data from the Ministry of Health, 70% of the 8,230 patients who died from COVID-19 had not received complete vaccinations. This proves that complete and booster vaccinations can reduce the risk of being treated and dying (Kemenkes RI, 2022).

In Indonesia, the achievement of the Covid-19 vaccination on March 28, 2022 was recorded as 195,958,039 people for the 1st vaccination, then 157,974,507,140,467 people for the 2nd vaccination, and then the 3rd vaccination was recorded at 20,134,645. people, while the vaccination target is 208,265,720 people (Kemenkes RI, 2022).

The achievement of the Covid-19 vaccination in Southeast Sulawesi Province on March 30, 2022 was recorded as 1,737,088 people or (94.32%) for the 1st vaccination, and 1,187,153 people or

(76.43%) for the 6th vaccination. -2, then the 3rd vaccination was recorded as 90,868 people, or (10.57%), while the vaccination target was 2,002,579 people (Kemenkes RI, 2022).

The achievement of the Covid-19 vaccination in Kendari City on March 30, 2022 has been recorded as 268,892 people or (101, 41%) for the 1st vaccination, followed by as many as 198,365 people or (71.42%) for the 2nd vaccination, and then vaccination The 3rd recorded as many as 25,857 people, or (9.75%), while for the vaccination target, as many as 265,147 people (Kemenkes RI, 2022). Nambo Health Center, data on vaccination achievements on March 30, 2022, has been recorded as many as 586 people, or (78.13%) for the total alignment of the 1st, 2nd, and 3rd vaccinations. The details are as many as 381 people or (65%) for the 1st vaccination, then 176 people or (30%) for the 2nd vaccination, then the 3rd vaccination recorded as many as 29 people or (5%), while for the target vaccinated as many as 750 people (Puskesmas Nambo, 2022).

The government's efforts to provide health protection to the community through the implementation of vaccinations have drawn controversy in the community. This is because the vaccine development time is quite short, about one year, and raises public concern about the side effects or impact of vaccines on vaccine providers (Pranita, 2020). Other refusals occurred on the grounds of side effects caused by less effective vaccines; feeling that their bodies were in good health so they did not need vaccines; worrying that they were not halal; and so on (National Survey Findings, 2021). For health, security, religious or belief reasons and concerns that the body is not good at handling vaccines and will instead attack people who have been vaccinated, resulting in illness and death (Herdianto, 2020).

The existence of erroneous information related to vaccines makes the public have a negative perception of the

COVID-19 vaccine being used, which makes them doubt when the COVID-19 vaccination will be carried out (Kholidiyah, Sutomo and Kushayati, 2021). This is supported by research by Argista (2021) showing that as many as 63% have a positive perception of the COVID-19 vaccine and 37% have a negative perception of the COVID-19 vaccine. Similarly, research by Astuti et al. (2021) shows that the public's wrong perception about the COVID-19 vaccination is caused by a lack of understanding from the public, which arises due to a lack of good communication from the authorities, such as health workers, to convince the public about the effectiveness of the COVID-19 vaccine. Promotive and preventive efforts must be carried out by health workers and the public regarding the COVID-19 vaccine (Moudy and Syakurah, 2020).

Understanding of vaccines and wanting to be vaccinated against COVID-19 is also influenced by family support. Family support is the key to accelerating the implementation of vaccination. Families who are aware of the importance of vaccines will influence their family members to follow the vaccine. But not all family members want to receive the vaccine. There is still a tendency for elderly children to be worried about getting their parents vaccinated because they are afraid of the safety and effectiveness of the vaccine. Readiness to follow the COVID-19 vaccine is influenced by advice and support from family and friends or closest people.

The preliminary survey, conducted through interviews with 5 residents in the working area of the Nambo Health Center, obtained information that 4 people said that they were not willing to be vaccinated because even though they were vaccinated, they still got the coronavirus. Then 2 other residents said that they were not ready to be vaccinated because there was news that people who had injected the vaccine suddenly became paralyzed, blind, and died. Furthermore, 3 other residents said that they should participate in carrying out the

COVID-19 vaccine so that they are immune to the virus so they can go anywhere without wearing a mask anymore, because wearing a mask makes it difficult to go anywhere. Further interviews regarding community support revealed that 3 people said they did not get support from their families because the head of the family had not been vaccinated because they were afraid of the effects of the vaccine, but 2 other people said that although they did not receive support from their families, they had to be vaccinated because they wanted to apply for a job. vaccine card Meanwhile, based on their perceptions, it was found that 3 people showed negative perceptions and considered vaccinations to contain certain substances that have negative effects on the human body. while 2 others said that vaccination meant injecting a substance that can help boost the body's immune system against the coronavirus.

## METHOD

This type of research is descriptive analytic with a cross-sectional study design. A cross-sectional study is an analysis of the relationship between causal research variables that occur in the object of research (Arikunto, 2013).

The population in this study is the number of people who are in the working area of the Nambo Health Center in Kendari City, which is 8,327 people. Sampling was carried out using the Cluster Random Sampling technique, namely the sampling was carried out randomly based on the research areas (Notoatmodjo, 2015) and the number of samples was 99.

## RESULTS

**Table 1. Characteristics of Respondents Age, Job and Education in the Work Area of the Puskesmas Nambo**

Characteristics	n (99)	%
<b>Age (Years)</b>		
21-30	23	23,2
31-40	46	46,5
41-50	22	22,2
>50	8	8,1
<b>Total</b>	<b>99</b>	<b>100</b>
<b>Job</b>		
Tidak Bekerja	50	50,5
Nelayan	21	21,2
Wiraswasta	14	14,1
Swasta	9	9,1
PNS	5	5,1
<b>Total</b>	<b>99</b>	<b>100</b>
<b>Education</b>		
Tidak Sekolah	17	17,2
SD	12	12,1
SMP	4	4,0
SMA	34	34,3
D3	29	29,2
S1	3	3,0
<b>Total</b>	<b>99</b>	<b>100</b>

Source : Primary Data 2017

Based on the research results obtained from 99 research samples related to respondent characteristics data related to age, Job and education Table 1 shows that of the 99 respondents,

The data obtained shows that the largest age group is in the age group 31–40 years, namely 46 respondents (46.5%), and the lowest is in the age group > 50 years, namely 8 respondents (8.1%). In the characteristics of respondents based on occupation, the majority of respondents who did not work were 50 respondents (50.5%), while the lowest number of respondents was civil servants, which amounted to 5 respondents (5.1%). The characteristics of respondents based on education are most in high school education, namely 34 respondents (34.3%), while the education

level with the lowest number of respondents is S1, as many as 3 respondents (3.0%)

**Tabel 2. The relationship between public perception and vaccine availability in the working area of the Nambo Health Center**

Public perception	Provision of Vaccines						Statistic Test
	Not Willing		Willing		Total		
	n	%	n	%	n	%	
Not enough	19	46,3	22	53,7	41	100	X <sup>2</sup> count : 8,523 P-value : 0,282
Enough	11	19,0	47	81,0	58	100	
<b>Total</b>	<b>30</b>	<b>30,3</b>	<b>69</b>	<b>69,7</b>	<b>99</b>	<b>100</b>	

Source : Primary Data 2022

Table 2 shows that of the 99 respondents shows that among 41 respondents, there are 19 respondents (46.3%) who think that public perception is categorized as less and not willing to vaccinate, and 22 respondents (53.7%) who think that public perception is less but willing to vaccinate. Meanwhile, there were 11 respondents (19.0%) who argued that public perception was sufficient but not willing to vaccinate, and 47 respondents (81.0%).

The results of the Chi-square statistical test obtained the value of X<sup>2</sup> count = 8.523 and X<sup>2</sup> table = 3.841. Thus, if X<sup>2</sup> count > X<sup>2</sup> table, then H<sub>0</sub> is rejected and H<sub>a</sub> is accepted, and it is also known that the P-value = 0.282 > value = 0.05, meaning that there is a weak relationship between public perception and vaccine availability in the working area of the Nambo Health Center.

## DISCUSSION

Perception is the ability of the brain to translate stimuli or processes to translate incoming stimuli into the human senses. In human perception, there are different points of view in sensing. Some perceive that something is good or positive or negative perceptions that will affect visible or real actions (Sugihartono, et al., 2007). Chaplin

(2011) suggests that perception is the process of knowing or recognizing objective objects or events using the senses and awareness of organic processes. According to Firmansyah dan Akbar (2022), perception can be interpreted as the process of receiving stimuli through the five senses, which is preceded by attention so that individuals are able to know, interpret, and appreciate what is observed, both outside and within the individual. According to Pieter in Janiwarti and Saragih (2011), in general, perception is the process of observing the situation in the outside world by using the processes of attention, understanding, and recognition of objects or events. The stimulus received by a person is very complex. The stimulus enters the brain and then is interpreted. It is possible to give meaning through a complicated process and then generate perceptions. Negative perceptions that respondents have in the study are possible because information related to vaccines used to form immunity/artificial antibodies is still rarely accessible to the public. Information related to vaccines used to form antibodies to reduce the impact of being exposed to COVID-19 is very rarely obtained by the public. The current government's COVID-19 vaccination program, which is intended to build herd immunity, also seems forced and must be accelerated. In addition, the



circulation of hoaxes and fake news related to the COVID-19 vaccine has also further reduced public perception regarding the COVID-19 vaccine program that is being promoted by the government. The administration of the COVID-19 vaccine basically faces problems similar to those with the immunization program for toddlers. There are still many people who do not believe and doubt the effectiveness of the vaccine used. Some people question the halalness of the ingredients used to make vaccines; some ask about the quality of the injected vaccines; and some also question the impact of injecting the COVID-19 vaccine itself. In general, the type of vaccine that is widely used in Indonesia is the COVID-19 vaccine with the product brand CoronaVac. The Sinovac vaccine has the basic ingredients of the Corona virus (SARS-CoV-2) which has been inactivated (inactivated virus). This vaccine has passed phase III clinical trials and is declared safe for use.

Based on the results of statistical tests using the chi-square test, it shows that the calculated  $X^2$  value = 8.523, so it can be seen that  $H_a$  is rejected and  $H_0$  is accepted, which means that there is a relationship between public perception and vaccine availability in the working area of the Nambo Health Center. These results indicate that most of the public's perceptions are in the sufficient category, namely 58 respondents (58.6%) and 41 respondents (41.4%) in the less category. This is because people think that the COVID-19 vaccine has been declared safe to be given to the community and provides health benefits to vaccine recipients.

The perception built by the public regarding the COVID-19 vaccination program initiated by the government for the formation of herd immunity is inseparable from the influence of various factors. Freud (1936, quoted in Butarbutar, 2018) explains that the anxiety experienced by individuals can arise due to the influence and role of the environment around them, the stimuli they encounter, and their perceptions. The

COVID-19 vaccination program is a public policy taken by the government to reduce the risk of severity due to COVID-19 infection. This means that the injection of the COVID-19 vaccine is actually intended to force each individual to build antibodies in their body by introducing the inactivated Corona virus (SARS-CoV-2) into the body. Viruses that are intentionally introduced into the body can also be interpreted as entering pathogens into the body. Each pathogen has its own parts and is often different from one another, and the impact on the body will also be different. However, in the pathogen itself, there are antigens that function to form antibodies when in the human body. The coronavirus (SARS-CoV-2) that has been inactivated (inactivated virus) into the body will form antibodies because the body's immune system begins to identify the entry of foreign objects into the body. When humans are exposed to an antigen for the first time, their immune systems take time to be able to respond and produce special antibodies to overcome the antigen itself.

Willingness to be vaccinated is one of the factors that influences a person's perception. According to Najmah et al. (2021), the level of public acceptance of the immunization program is quite high. In this case, the public doubts receiving the COVID-19 vaccination due to the halalness of the vaccine itself, so that it affects public acceptance of the COVID-19 vaccine. Of course, this of course affects people's willingness to vaccinate against COVID-19, because people don't want to take risks by vaccinating, and some people also think that they are healthy and in good condition, so they only need to carry out health protocols and improve the body's immune system by consuming vitamins.

## CONCLUSION

Based on the results of research on the relationship between family support and community perception with the availability of the COVID-19 vaccine in the working



area of the Nambo Health Center, it can be concluded that there is a relationship between perception and the community's willingness to vaccinate against COVID-19 in the working area of the Nambo Health Center, with an X2 count = 8,523.

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