



Relationship between Knowledge Level and Community Compliance Receiving Covid-19 Vaccine in RT III Binanga Environment, Mamuju Regency in 2021

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ABSTRACT

Knowledge is the result of knowing, and this happens after people sense a certain object. Sensing occurs through the human senses, namely the senses of sight, hearing, smell, taste, and touch. Most of human knowledge is obtained through the eyes and ears. Vaccines are one of the most effective and economical ways to prevent infectious diseases, making the development of vaccines to attenuate coronavirus infections very necessary. The purpose of this study was to determine the level of knowledge with community compliance in receiving the COVID-19 vaccine. This type of research uses analytic observational, with a cross-sectional design. A sample of 115 people used the accidental sampling technique, in which the researcher used an instrument in the form of an online questionnaire via a google form and distributed via whatsapp, instagram, and zendly applications to the community in RT-III Binanga environment. The results of the study using the Chi-Square test showed a p-value = 0.027, which means that there is a relationship between the level of knowledge and community compliance in receiving the COVID-19 vaccine.

Keywords: *Knowledge, Community compliance, COVID-19 vaccine.*

1. INTRODUCTION

Health problems are one of the factors of quality of life that reflect on the fulfillment of basic human needs. On December 31, 2019, the WHO China National Representative Office reported a case of pneumonia of unknown cause in the city of Wuhan, Hubei Province, China. January 2020, China identified pneumonia of unknown cause as a new type of corona virus (Coronavirus, or often called COVID-19/Corona Virus Disease-19). On January 30, 2020, WHO declared it a public health emergency of international concern(1).

Indonesia reports 2 confirmed cases of COVID-19. Starting from this case, the number of cases of Indonesian people infected with the corona virus is increasing every day, the highest increase was reported on July 15, 2021 with 56,757 cases. As of October 26, 2021, COVID-19 cases in Indonesia have reached 4,241,090 confirmed cases with the number of deaths from COVID-19 being 143,270 cases (2.98%). Indonesia is currently included in the Community Transmission category(2)

Until now, there are still many people who underestimate the corona virus and do not implement health protocols according to the rules made by the government, so the risk of COVID-19 transmission is increasing. Therefore, it is not only necessary to intervene in the implementation of health procedures, but also to immediately take other effective intervention measures to stop the spread of disease through vaccination efforts against the community(1)

2. LITERATURE REVIEW

The government has tried its best to overcome the challenges during the COVID-19 pandemic. It is known that the President of the Republic of Indonesia (RI) formed a national team to accelerate the development of a COVID-19 vaccine. Presidential Decree No. 18/2020 issued on 3 September 2020 regulates the formation of a COVID-19 vaccine development team under the supervision of the Minister of the Economy. In addition, the Research and Technology Department is responsible for reporting to the President on the daily work of the team. On October 6, 2020, the President signed and issued a Presidential Regulation (Perpres) on vaccine procurement and implementation of a vaccine plan in response to the COVID-19 pandemic. The Presidential Regulation stipulates that the government will prepare for the procurement and distribution of vaccines as well as the implementation of vaccines(3)

The COVID-19 vaccine is one of the government's main goals in dealing with COVID-19, which has become global, especially the State of Indonesia. The purpose of the COVID-19 vaccination is to reduce the spread of COVID-19, reduce morbidity and mortality, achieve immunity and protect the community from COVID-19, so as to improve the quality of society and the economy(4)

Even so, it is undeniable that there are still many people who refuse to be vaccinated. Groups that refuse to be vaccinated have many reasons, from health issues to religious reasons. Starting from concern for health, there are several community groups with different backgrounds. Due to concerns about the increase in deaths or casualties from vaccines. This is because they are worried that the body is not good at handling vaccines

and will actually attack people who have been vaccinated and end up with disease and death(5).

This vaccination solution is again a problem for some people, due to doubts about vaccine development, the vaccine development time is quite short. This is different from other vaccines which may take years. This then raises public concern about the side effects or impact of vaccines on vaccine providers(6). So that public perceptions and attitudes become a benchmark for public awareness and public knowledge about vaccines. Promotive and preventive efforts must be carried out by health workers and the community. awareness of people who have vaccinated is still very little so that it can be related to the problem of a person's level of knowledge in vaccinating. The development of the internet and the convenience of the latest information provide support for the amount of information that can be accessed. The spread of misinformation will affect people's perceptions of the COVID-19 vaccine and thereby affect people's behavior. Decisions and choices are made more based on information from the internet, especially updated social media(7)

Based on the results of survey data as of November 3, 2021, which was carried out by the Ministry of Health together with the Indonesian Technical Advisory Group On Immunization (ITAGI), it was found that Papua Province has a lower vaccination rate than West Papua Province, while in West Sulawesi Province, only around approx. 36.93% from 30 Provinces. In the city of Mamuju the vaccine target is around 83,553 people, the data of people who have been vaccinated are around 39.72%. This situation means that there are still many people who have not vaccinated(8).

This is because there are many issues that affect information about the COVID-19 vaccine, such as lack of knowledge, halalness, and the dangers of the COVID-19 vaccine. Research regarding the relationship between knowledge level of knowledge and community compliance in receiving the COVID-19 vaccine in West Sulawesi has never been done before. The public's attention to the COVID-19 vaccine and the widespread spread of various false information and misinformation in the community became the basis of the study.

This research was conducted to increase knowledge and find out how the response of residents who have carried out vaccines with community compliance with the COVID-19 vaccine by using data sourced from questionnaires. To find out these problems, this study will conduct an analysis by linking the level of knowledge with the community's compliance with receiving the COVID-19 vaccine, and classifying knowledge, community compliance with the COVID-19 vaccine in the Mamuju area, Binanga Environment, RT-III, Mamuju Regency.

3. RESEARCH METHODOLOGY

The type of research used is analytic observational with a cross-sectional design. Analytical observation is research that looks for the relationship between one variable and another(9). This study looks for the relationship between the level of knowledge and community compliance in receiving the COVID-19 vaccine, where this study only conducted one-time observations. The population in this study were people in RT 3, Binanga Village, Mamuju Regency as many as 331 people. In the accidental sampling technique, the sampling is not predetermined. The researcher immediately collected data from the sampling unit encountered and was willing to become a respondent. And the number of respondents who are willing to take part in this research was found in the RT-III Community of Binanga Environment as many as 115 respondents and carried out during 1-28 October 2021.

4. RESULT AND DISCUSSION

Table 1 Distribution of Frequency Based on Recipients of RT-III Community Vaccine Doses in Binanga, Mamuju Regency year 2021

Received Vaccination	Frequency (n)	Percentage (%)
Yes	96	83,5%
No	19	16,5%
Total	115	100%

Source: Primary Data, 2021

Based on table 1 above, it shows that of the 115 respondents, the number of respondents who received the vaccine was 96 respondents (83.5%), and 19 (16.5%) were vaccinated.

Table 2 Distribution of Frequency Based on Recipients of Vaccine Doses in RT-III Community in Binanga, Mamuju Regency Year 2021

Dose	Frequency (n)	Percentage (%)
No Vaccine	19	16,5%
Dose 1	30	26,1%
Dosage Two	66	57,4%
Total	115	100%

Source: Primary Data, 2021

Based on table 2 above, it shows that from 115 respondents, the number of respondents who did not vaccinate

were 19 respondents (16.5%), recipients of dose 1 vaccination were 30 (26.1%), and recipients of vaccine dose 2 were 66 (57.4). %).

Table 3 Distribution of Frequency Based on Community Vaccination Compliance RT-III Environment Binanga Mamuju Regency Year 2021

Vaccination Compliance	Frequency (n)	Percentage (%)
Comply	96	83,5%
Disobedience	19	16,5%
Total	115	100%

Source: Primary Data, 2021

Based on table 3 above, it shows that of the 115 respondents, the number of respondents who complied was 96 respondents (83.5%), and those who did not comply were 19 respondents (16.5%).

Table 4 Distribution of Frequency Based on Community Knowledge Receiving RT-III Vaccine in the Binanga Environment, Mamuju Regency in 2021

Knowledge Level	Frequency (n)	Percentage (%)
Good	57	49,6%
Enough	55	47,8%
Less	3	2,6%
Total	115	100%

Source: Primary Data, 2021

Based on table 4 above, it shows that from 115 respondents, the number of respondents who have good knowledge are 57 respondents (49.6%), 55 respondents (47.8%) have sufficient knowledge, and 3 respondents (2.6) lack knowledge. %).

Table 5 Knowledge with Community Compliance in Receiving COVID-19 Vaccines in RT-III Binanga Environment, Mamuju Regency Year 2021

Knowledge level	Compliance in Receiving COVID-19 Vaccine				Total		P value*
	Comply		Disobedience				
	F	%	F	%	F	%	
Good	52	45,2	5	4,3	57	49,6	0,027
Enough	44	38,3	14	12,2	58	50.4	
Total	96	83,5	19	16,5	115	100,0	

Source: Primary Data, 2021

Based on table 5 above, it is feasible to carry out the Chi-Square test showing that from 115 respondents there are respondents who obey have good knowledge as many as 52 respondents (45.2%), and sufficient knowledge as many as 44 respondents (38.3%). Meanwhile, respondents who do not comply have good knowledge of 5 respondents (4.3%), and 14 respondents (12.2%) are sufficient. The results of the 2x2 statistical table test using the chi-square test, the continuity correction value shows a p-value = 0.027 which is smaller than the value = 0.05, which means H_0 is rejected, meaning that there is a relationship between the level of knowledge and community compliance in receiving the COVID-19 vaccine but, the people who are not vaccinated are caused by the people in RT-III Binanga Environment, Mamuju Regency.

Based on the results of the 2x2 Chi-Square Test, it shows that there is a relationship between knowledge and community compliance in receiving the COVID-19 vaccine, supported by primary data obtained from 115 respondents, obedient people have good knowledge of having carried out or following government instructions in vaccinating COVID-19 the most dominant or as many as 52 respondents, and the results obtained by the obedient community have sufficient knowledge of 43 respondents. Meanwhile, respondents who do not comply have good knowledge of 5 respondents, and people who do not comply and have sufficient knowledge are 15 respondents, where the Continuity Correction value is $p = 0.027$ which means there is a relationship between the level of knowledge and community compliance in receiving vaccines.

This is supported by data from interviews conducted by (10) researchers with several respondents who have directly vaccinated, saying that COVID-19 vaccination is an obligation for all people, because vaccination is also a form of effort in dealing with problems regarding the COVID-19 virus. In addition, some people also feel obliged to vaccinate because they are forced to carry out mass vaccinations, causing a sense of distrust in the government because of coercion to the community in vaccinating, then for people who do not vaccinate there are several reasons, including the most dominant reason, namely they are worried about the side effects of the COVID-19 vaccination, in addition some

respondents who have not been vaccinated are also afraid of needles, and some of them have comorbid diseases (congenital/chronic diseases) so they do not vaccinate against COVID-19, this is also a problem. It is also characterized by a lack of knowledge which causes the public not to participate in supporting the vaccine vaccination program because they tend to refuse or hesitate to be vaccinated against COVID-19.

Based on some literature or research such as research conducted by there is a significant relationship between the level of knowledge and self-efficacy which describes the level of knowledge and self-efficacy of COVID-19 vaccination in the good category, this is due to the high level of knowledge of 47 (43%) respondents.

The results of the study (11) which are almost the same, show the level of knowledge with p-values of 0.041 and $X^2 = 7.01$, namely there is a relationship between knowledge and willingness to vaccinate COVID-19.

This study is also almost in line with research which found that the level of knowledge of the hamlet residents on the implementation of the vaccine program was quite good (76-100%) on indicators regarding knowledge of the existence of a vaccine program. And contraindications to the use of vaccines are quite sufficient (56-75%) and less (<56%). The significance result is 0.000 (< 0.05) so it can be concluded that there is a relationship between knowledge and willingness to vaccinate the residents of Dukuh Menanggal, Surabaya (12).

Likewise with research (Widiyanti, Feby, 2021) which states that there is a relationship between knowledge and willingness to vaccinate COVID-19 and there is a relationship between behavior and willingness to receive vaccines.

This is also in accordance with the theory of knowledge according knowledge is the result of knowing, and this occurs after people have sensed a certain object. Knowledge is also the result of knowing about a certain object and this happens after someone senses the object. Knowledge has a very close relationship with education, if someone has a low education, the knowledge will be lower(13)

Knowledge of COVID-19 Vaccination has a very important role in completing the government's target in dealing with COVID-19 vaccination and COVID-19 problems(14).

5. CONCLUSION

- a. Respondents who have good knowledge about the COVID-19 vaccine are 57 respondents (57.0%), and sufficient knowledge is 58 respondents (58.0%).
- b. Respondents who complied with vaccination were 96 respondents (96.0%), and those who did not comply were 19 respondents (19.0%).
- c. There is a relationship between the level of knowledge and community compliance in receiving the COVID-19 vaccine, however, the people who are not vaccinated are caused by the people in RT-III Binanga Environment, Mamuju Regency.
- d. It is recommended for further researchers to examine other variables related to compliance in receiving COVID-19 vaccination.

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