

# **The Relationship between the Quality of Vaccination Services for COVID-19 with Community Satisfaction in the Work Area Baron Public Health Center, Nganjuk Regency**

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## **ABSTRACT**

Puskesmas play an important role as implementers of COVID-19 vaccination and are required to provide quality services in order to generate community satisfaction. The purpose of this research is to find out the relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency. This type of research is correlational analytic with cross sectional approach. The population in this study was the entire community participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, namely 300 people. Samples are taken by technique random sampling and obtained a large sample of 171 respondents. The data collection instrument was a questionnaire and data analysis used the Spearman Rank test with  $\alpha = 0.05$ . Out of a total of 171 respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, almost all assessed the quality of COVID-19 vaccination services in the good category, namely 145 respondents (84.8%). Out of a total of 171 respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, most respondents felt satisfaction in the moderate category, namely 92 respondents (53.8%). The Spearman Rank test produces a p-value = 0.000 <  $\alpha$  (0.05) so that the research hypothesis is accepted. The correlation coefficient value  $r = 0.377$  or equivalent to 37.7% indicates the strength of the relationship is in the low category. There is a relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency. Measuring patient satisfaction can help puskesmas to evaluate the health services that have been provided and improve the quality of COVID-19 vaccination services.

**Keywords:** COVID-19 Vaccination, Community Satisfaction, Service Quality.

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## **INTRODUCTION**

In December 2019 a new pneumonia case was reported in Wuhan City - China, hereinafter referred to as Coronavirus Disease or COVID-19 for short. The disease caused by the SARS-CoV-2 virus within 3 months has developed into a global pandemic and has caused increased morbidity and mortality (Isnaeni, 2020). One effort that continues to be developed to overcome the COVID-19 pandemic is through vaccination activities. On October 6, 2020, the President of the Republic of Indonesia issued a Presidential Regulation (Perpres) regarding the procurement of vaccines and the implementation of vaccination programs to tackle the COVID-19 pandemic. The challenge faced by the government is to provide the best possible COVID-19 vaccination services to the community, so as to produce high satisfaction. However,

the reality on the ground shows that there are still many health workers who are unable to provide quality COVID-19 vaccination services, which has resulted in low satisfaction for the vaccine recipient community. This is reflected in the results of preliminary interviews conducted by researchers during the implementation of the COVID-19 vaccination on December 11, 2021 at the Baron Health Center, Nganjuk Regency. Interviews with 10 vaccine recipients regarding satisfaction with vaccination services showed that 7 people (70%) felt unsatisfied, due to several factors, including: long waiting times, unclear information on vaccine flow, lack of friendliness of staff, and complaints of arm pain, dizziness and nausea in the first 15 minutes of the AEFI phase (Post-Immunization Follow-up Events).

Based on data from Our World in Data (2021) in July 2021 the number of vaccination doses that have been given around the world was recorded at 3.76 billion doses. While the total population in the world who have received complete vaccinations is recorded at 1.04 billion people or 13.3% of the total world population. In Indonesia, the number of people who have received the first dose of vaccine as of December 25, 2021 has reached 156,182,585 people or 74.99% of the total target population. Furthermore, the number of people who received the second dose of vaccine reached 110,407,000 people or 53.01% of the total target population. While the number of residents who received the third dose ( booster ) vaccine was recorded at 1,280,673 people. The level of achievement of the COVID-19 vaccination in Indonesia in 2021 has exceeded the target set by WHO, namely a minimum of 40% of a country's total population has received the first and second doses of vaccine (Tempo.co, 2021). Initially, the elderly group aged 60 years and over was excluded from the COVID-19 vaccination target, but since February 2021, the elderly group has been included in the vaccination target, together with the comorbid group, breastfeeding mothers and COVID-19 survivors who have more than 3 month (RI Ministry of Health, 2021). Then on December 14 2021, the government has determined that children aged 6-12 years are included as the target group for the COVID-19 vaccination. The achievement of the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency in 2021 for the 1st dose of vaccine was recorded at 88.9%. Meanwhile, the achievement of the second dose of vaccine was recorded at 76.74%. Then the achievement of the 3rd dose of vaccine was recorded at 14.39%. This achievement has not met the target set by the government, namely 100%. Therefore, it is necessary to study the causes of these problems, so that a strategy can be developed so that the results can meet the target.

Quality health services is one of the main responsibilities of the government, both central and regional for the community. The implementation of health services to the community is technically the responsibility of the puskesmas because the puskesmas is a health institution that has direct contact with the community (Fadhilah, 2021). During the COVID-19 pandemic, puskesmas played an important role as implementers of the COVID-19 vaccination and were required to provide quality services to provide satisfaction to the community using puskesmas services. The quality of health services can be measured based on five dimensions of public services, including: aspects of tangibles , reliability , responsiveness , assurance , and empathy (Fadhilah, 2021). If in the implementation of the COVID-19 vaccination service, the dimensions of service quality are not carried out properly, it will reduce the satisfaction of the vaccine recipient community. This can have an impact on the low level of public confidence in participating in the next dose of vaccination. Meanwhile, people who have never been vaccinated have also become reluctant to take the vaccine after hearing various information about low satisfaction from previous vaccine recipients. The impact is that the achievement of the COVID-19 vaccination target in the working area of the local puskesmas does not meet the target set and hinders government programs in the context of tackling the COVID-19 pandemic.

Efforts to increase the satisfaction of the vaccine recipient community are by improving the quality of COVID-19 vaccination services provided by health workers at the puskesmas. In

order to provide quality vaccination services, clear standard operating procedures (SOP) must be established, so as not to cause confusion among the health workers themselves. The SOP that has been determined must be socialized effectively to health workers carrying out vaccinations accompanied by adequate training. In addition, the need for infrastructure support and physical health facilities used in COVID-19 vaccination activities. The better and more complete the infrastructure and physical facilities available, the easier the vaccination process will be and increase the comfort of the community. For example, a clean building, a large parking area, a comfortable and safe waiting room, and the availability of medical devices that meet health protocol requirements.

Based on the description above, the purpose of this research is to know the relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency.

## **METHODS**

The research design is correlation with cross sectional approach . The subjects of this study were all the people participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, with a total quota of 300 vaccinations. The sample size was calculated by taking the Slovin formula and obtained by 171 respondents. Retrieval technique done by random sampling.

Independent variable of this research is service quality, while the dependent variable of this research is community satisfaction. Data collection instruments used in this study is a questionnaire.

The research data were analyzed using the Spearman Rank statistical test . If the  $p$  - value  $\leq \alpha$  (0.05 ) , then the hypothesis is accepted, meaning that there is a relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency. Whereas if  $p$  - value  $> \alpha$  (0 , 05) , then the hypothesis is rejected, meaning that there is no relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency.

## RESULTS

### A. Characteristics of Respondents

The following presents an overview of the characteristics of respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency:

Table 1. Characteristics of Research Respondents

Characteristics	Category	<i>f</i>	%
Gender	Man	93	54.5%
	Woman	78	45.6%
	Total	171	100.0 %
Age	< 25 years	52	30.4%
	25 – 50 years	114	66.7%
	> 50 years	5	2.9%
	Total	171	100.0 %
Education	Graduated from elementary school	0	0.0 %
	Middle school graduate	28	16.4%
	Graduated from high school	104	60.8%
	Graduated from Academy / PT	39	22.8%
	Total	171	100.0 %
Work	Doesn't work	34	19.9%
	farmer	27	15.8%
	Self-employed	40	23.4%
	Employee	70	40.9%
	Total	171	100.0 %

Source: Primary Data (2022)

Based on the data in Table 1, it is known that out of a total of 171 respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, the majority were male, with 93 respondents (54.5%); most of them are aged 25-50 years as many as 114 respondents (66.7%); most of them had their last education, graduating from high school, as many as 104 respondents (60.8%); and most of them have jobs as employees as many as 70 respondents (40.9%).

### B. Typical characteristics Variable

The following presents an overview of the characteristics of the variable Quality of Service and Community Satisfaction participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency:

Table 2. Characteristics of Research Variables

Variable	Category	<i>f</i>	%
Service quality	Not enough	1	0.6%
	Enough	25	14.6%
	Good	145	84.8%
	Total	171	100.0%
Community Satisfaction	Low	2	1.2%
	Currently	92	53.8%
	Tall	77	45.0%
	Total	171	100.0%

Source: Primary Data (2022)

Based on the data in Table 2, it is known that out of a total of 171 respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, almost all rated the quality of COVID-19 vaccination services in the good category, namely 145 respondents (84.8%). It is also known that the majority of respondents feel satisfied in the moderate category, namely as many as 92 respondents (53.8%).

### C. Analysis Bivariate

Next, the results of a bivariate analysis of the relationship between Service Quality and Community Satisfaction of COVID-19 vaccination participants in the working area of the Baron Health Center, Nganjuk Regency are presented:

Table 3. Relationship between Service Quality and Community Satisfaction of COVID-19 vaccination participants

Service quality	Community Satisfaction						Total	
	Low		Currently		Tall			
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Not enough	1	0.6	0	0.0	0	0.0	1	0.6
Enough	1	0.6	23	13.5	1	0.6	25	14.6
Good	0	0.0	69	40.4	76	44.4	145	84.8
Total	2	1.2	92	53.8	77	45.0	171	100.0

$p\text{-value} = 0.000 < \alpha (0.05) \text{ } r = 0.377$

Source: Primary Data (2022)

Based on the cross tabulation in Table 3, it is known that most of the respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, considered that the quality of COVID-19 vaccination services was in the good category, while at the same time feeling satisfaction in the high category, namely 76 respondents (44, 4%).

Furthermore, the results of testing the hypothesis with the *Spearman Rank* test showed a  $p\text{-value} = 0.000 < \alpha (0.05)$  so that the research hypothesis was accepted. This means that there is a relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency.

The correlation coefficient value  $r = 0.377$  or equivalent to 37.7% indicates the strength of the relationship is in the low category.

## DISCUSSION

### A. Quality of COVID-19 Vaccination Services

The facts of this study stated that out of a total of 171 respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, almost all of them rated the quality of COVID-19 vaccination services in the good category, namely 145 respondents (84.8%). The worst rating was given to respondents for the staff's inaccuracy in providing COVID-19 vaccination services. This causes respondents to have to wait a long time in the queue. While the best assessment is given by respondents to the services of officers who provide clear and complete information about referral health facilities if at any time vaccine participants experience complaints of side effects. The best assessment was also given to the skills of vaccination officers who were able to communicate politely with COVID-19 vaccination participants.

According to Parasuraman (in Tjiptono and Chandra, 2012 ), the quality of public services can be measured by five dimensions, including: (1) *Reliability* , namely the ability to perform the promised services accurately and reliably; (2) *Responsiveness* , namely the ability to help customers and provide services quickly or responsively; (3) *Assurance* , namely the knowledge and courtesy of officers and the ability to generate trust and confidence; (4) *Empathy* , namely caring or personal attention to customers; and (5) *Tangibles* , namely physical facilities, equipment, personnel and communication media. According to Fadhilah (2021), quality COVID-19 vaccination services are the responsibility of the puskesmas, because the puskesmas is a health institution that has direct contact with the community in administering vaccinations. If in the implementation of the COVID-19 vaccination service, the dimensions of service quality are not carried out properly, it will reduce the satisfaction of the vaccine recipient community, so that public confidence to participate in the next dose of vaccination stage will decrease.

Through this research it can finally be seen that of the five service dimensions, the *reliability* dimension is a dimension that still needs to be improved, especially in terms of the timeliness of the COVID-19 vaccination service, so that it does not cause the vaccination participants to wait too long. The reason for the long queue is because the arrival of the community accumulates at certain hours, so the number of vaccine workers is not balanced with the number of vaccine participants. As for the quality of the other dimensions, namely *responsiveness* , *assurance* , *empathy* , and (5) *tangibles* , in general they are good and their quality must be maintained.

### B. Community Satisfaction

The facts of this study stated that out of a total of 171 respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, most respondents felt satisfaction in the moderate category, namely 92 respondents (53.8%). The lowest satisfaction felt by respondents was the inconvenience of the waiting room and the length of the queue from the time the patient arrived to receive the vaccination service. While the highest satisfaction felt was the cost of vaccination which was free from the government, the location of the vaccine which was not far from the respondent's residence, as well as the skills and experience of the vaccination staff.

According to Sabarguna (2008) there are several indicators to measure patient satisfaction, namely: (1) aspects of comfort, (2) aspects of cost, (3) aspects of technical competence of officers, and (4) aspects of the relationship between patients and health workers. Meanwhile, according to Griffith (in Trisnanto, 2017) suggests that there are several factors that influence a person's feelings of satisfaction with health services, namely: (1) the attitude and approach of hospital staff to patients, (2) the quality of care services received by patients, (3 ) administrative procedures, and (4) the facilities provided.

Researchers are of the opinion that the aspect of satisfaction that still needs to be much improved is the discipline when serving the COVID-19 vaccination officers in the working area of the Baron Health Center, Nganjuk Regency. When vaccination participants experience a long waiting time, they will inform their neighbors and other relatives about this. This can reduce people's interest in getting vaccinated. Delays in vaccination services can also reduce the opportunity for the public to obtain vaccination services, because some of the service time is wasted.

### **C. The Relationship between the Quality of COVID-19 Vaccination Services and Community Satisfaction**

The results of the cross tabulation showed that most of the respondents participating in the COVID-19 vaccination in the working area of the Baron Health Center, Nganjuk Regency, considered that the quality of COVID-19 vaccination services was in the good category, while at the same time feeling satisfaction in the moderate category. Furthermore, the results of testing the hypothesis with the *Spearman Rank* test showed a  $p\text{-value} = 0.000 < \alpha (0.05)$  so that the research hypothesis was accepted. This means that there is a relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency. The correlation coefficient value  $r = 0.377$  or equivalent to 37.7% indicates the strength of the relationship is in the low category.

According to Fadhillah (2021), during the COVID-19 pandemic, puskesmas played an important role as implementers of the COVID-19 vaccination and were required to provide quality services to provide satisfaction to the community using puskesmas services. If the quality of health services is not implemented properly, it will reduce the satisfaction of the vaccine recipient community, so that the achievement of the COVID-19 vaccination target in the local puskesmas work area does not meet the set targets and hinders government programs in the context of tackling the COVID-19 pandemic. Meanwhile, according to Yuantari (2022), the better the quality of service, the patient satisfaction increases. Quality service will produce high patient satisfaction, so that Puskesmas can determine patient satisfaction of existing health services provided and able to improve quality service.

*Researchers are of the opinion that the quality of service provided by COVID-19 vaccination officers in the working area of the Baron Health Center, Nganjuk Regency, is generally good, so that it has an impact on creating community satisfaction for vaccination participants. However, from several aspects of the quality of the services provided, there are still a few that are still not good, namely the inaccuracy of the service time provided and causing long waiting times for vaccination participants. Long waiting times were sensitively responded by vaccination participants as an important factor causing dissatisfaction. This is the reason why the service quality of the COVID-19 vaccination workers is considered good, but the satisfaction felt by the community is only at a moderate level. The slow waiting time is allegedly the main cause of suboptimal community satisfaction.*

It should also be noted that even though there is a significant relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Public Health Center, Nganjuk Regency, the results of the correlation coefficient values show a low close relationship. This means that service quality is not the only factor that dominantly influences community satisfaction. Socio-economic and political factors need to be studied further as factors that also influence the satisfaction of the people participating in the COVID-19 vaccination.

## CONCLUSION

Based on the results of the research and discussion, the conclusions of this study are: there is a relationship between the quality of COVID-19 vaccination services and community satisfaction in the working area of the Baron Health Center, Nganjuk Regency. This is evidenced by the results of the *Spearman Rank* test with a  $p\text{-value} = 0.000 < \alpha (0.05)$  so that the research hypothesis is accepted. The correlation coefficient value  $r = 0.377$  or equivalent to 37.7% indicates the strength of the relationship is in the low category.

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