

## Strategy for the Success of the COVID-19 Vaccine Program in North Kayong Regency of Indonesia



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### Keywords

*advocacy;  
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strategy;  
vaccine;*

### Abstract

Indonesian minister of health in 2021 regarding the implementation of vaccination in Indonesia, this is the basis for implementing the COVID-19 vaccination policy in all regions of Indonesia, this is done to reduce the spread of COVID-19. This research was conducted to determine the influence of communication, resources, and the government in carrying out vaccination in the North Kayong Regency and how the strategy is to achieve the COVID-19 vaccination target. The results showed a partial effect of communication, resources, disposition, and bureaucratic structure on implementing vaccination policies in the North Kayong Regency. The alternative strategy implemented in the COVID-19 Vaccine Program in North Kayong Regency is an advocacy strategy. Advocacy is intended as a strategic and integrated action carried out, both by individuals and community groups by including problems with the policy agenda and controlling decision-makers to seek solutions while building the base of support for the enforcement of public policies made to address the issues related to the COVID-19 Vaccine Program in North Kayong Regency. The strategy is carried out in 2 stages: the target audience's analysis stage and the Action stage. Advocacy efforts are carried out by delivering social campaigns and coordination between agencies to garner commitment, concrete support, and active participation from regional leaders at the provincial level (governors).

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## 1 Introduction

Public policies by the state can be felt in almost all aspects of a citizen's life from birth to death (Cochran & Malone, 2014). Public policy has been explained in several concepts used in various laws, decision-making, and others public policy can also be linked to political objectives, legislative processes, and regulations (Buşmachi & Ursu, 2012). These public policy regulations include both internal and broad arrangements for community groups (Johanson & Vakkuri, 2019). Policy implementation is a crucial stage in the policy cycle because at this stage the policy is translated into action (O'Toole, 2000; Fischer & Miller, 2017). There is a process carried out within a particular time regarding public policy. This process is analytical to solve problems, especially in the social and political domains, through rational analysis. The steps in finding public policy are first to identify the problem correctly. Then, analyze what solutions can be done. Then the best option is chosen through various considerations so that the resolution that will be created can be more optimal).

Public policies issued for these various fields then manifest a more stable structure and standardization by the government through regulations to short-term and long-term programs (Omale & Daniel, 2016). Apart from being carried out by government actors, public policy also requires the active role and participation of other actors, especially the community, as the leading actor who will also apply the chosen policy to implement its supervision (Elyta & Martoyo, 2021). Public policy also exists in other aspects such as education, tourism, economy, and health. One of the implementations of public policies by the government in health aspects can be seen in tackling COVID-19 (Kartikasari & Elyta, 2021).

COVID-19 created the most significant behavioral changes in this modern era due to the adaptation process and the public policies implemented (McConnell & Stark, 2021). This pandemic causes two parallel crises. First is the health crisis. This pandemic has caused hundreds of thousands of deaths from around the world. The second is the economic crisis. Various countries then implemented lockdowns to prevent the spread of the pandemic from entering their countries (IMF, 2020). Many traders and freelancers were initially out of business, went bankrupt, and were laid off because public policies forced them to limit their activities which resulted in reduced or even cessation of their economic activities (Blackman et al., 2020). The policy of keeping a distance is slowly felt to be lacking, several countries then decide on public policies in the form of procurement of vaccinations which are expected to support the immune resistance of their citizens (Hills, 2021). This impact is also felt in Indonesia, including in the province of West Kalimantan.

The province of West Kalimantan has also implemented a COVID-19 vaccination policy in its territory. However, this policy has not achieved the target so far, considering that the program requires a long process, as an illustration, data released by the Health Office of West Kalimantan Province as of September 26, 2021, shows that the population in the province has reached 5,414,390, with the vaccine target reaching 3,872,477 and the third vaccine target reaching 25,020. The realization of the first vaccine has come 923,426 people (23.85%), the second vaccine was 563,324 people (14.60%), while the third vaccine reached 18,019 people (72.02%) (Dinas Kesehatan Provinsi Kalimantan Barat, 2021).

North Kayong Regency is one of the areas in West Kalimantan that is the target of the COVID-19 vaccination. As an illustration, data released by the Health Office of West Kalimantan Province as of September 26, 2021, shows that the realization of the first vaccine has reached 22,516 people (24.86%), the second vaccine was 10,641 people (11.75%), while the third vaccine got 445 people (67.12%) (Dinas Kesehatan Provinsi Kalimantan Barat, 2021). Based on these achievements, it can be understood that the implementation of the vaccination policy in the North Kayong Regency needs to be optimized so that the policy can be completed according to the targets of the West Kalimantan Provincial Government and the Central Government.

As an illustration, in June 2021, the Sukadana Health Center in North Kayong Regency carried out vaccinations in 10 villages in the sub-district. The vaccination program prioritized for the elderly and

educators is carried out by picking up the ball by visiting every village on Friday (18/6/2021). Initially, the vaccination targeted the elderly and educators. Still, due to the small number of targets, the vaccination was also opened to non-elderly, such as the general public, public servants, traders, and others who have not received the vaccine. The obstacles faced by the Puskesmas were due to incorrect information received by the community through existing social media (Perrin et al., 2005).

The problem is mainly because people already have a negative paradigm about this vaccine, the influence of social media, especially hoaxes that they immediately believe in (MC Kab Kayong Utara, 2021). In the regulation of the Ministry of Health as the basis for administering the COVID-19 vaccination, it is stated that this program is a government program whose entire financing is borne by the central government and its implementation. In implementing the COVID-19 Vaccination, the Central Government involves the Provincial Government Regency/Municipal Governments, and legal entities/business entities (Sotirov & Memmler, 2012; Waterston & Haroon, 2008).

The implementation of the COVID-19 vaccination is carried out through the Vaccination Program or Mutual Cooperation Vaccination. Recipients of Vaccines in Program Vaccination services are free of charge. Employees, families, and other individuals involved in the family as recipients of the COVID-19 Vaccine in the Mutual Cooperation Vaccination service are free of cost/free. Furthermore, the purpose of the COVID-19 Vaccination:

- Reduce the risk of transmission of COVID-19;
- Minimize the critical impact and death due to COVID-19;
- Create immunity in community groups; and
- Increase the community's immunity in fighting COVID-19 so that they can be socially and economically productive.

The scope of the Corona Virus Disease 2019 (COVID-19) vaccination includes:

- Initial planning of vaccine implementation;
- COVID-19 Vaccination targets;
- Distribution of tools and logistics to support vaccination and COVID-19 vaccines;
- Implementation of COVID-19 Vaccination;
- Cooperation in the implementation of COVID-19 Vaccination;
- Monitoring and prevention of Adverse Events after COVID-19 Vaccination;
- Communication strategy;
- Recording and reporting;
- Funding; and
- Guidance and supervision.

In the context of implementing the Vaccination Program, the district/city health office and the provincial health office in stages carry out data collection and determination of implementation Health Service Facilities and determine the distribution of COVID-19 vaccines, supporting equipment, and logistics for implementation purposes (Casadesus-Masanell & Ricart, 2010). In general, pandemic protocols were at the heart of pandemic response capacities in governments (OECD, 2021) More, to grow public acceptance of COVID-19 vaccination, the Central Government and Regional Governments must develop and implement a communication strategy by increasing the community's understanding, attitudes, and behavior so that they are motivated to get the COVID-19 Vaccination (Sandberg & Hofer, 1987; Astrachan, 2010). The communication strategy is aimed at:

- Increase public knowledge of COVID-19 vaccination;
- Equip the public with accurate and correct information to avoid misinformation/hoaxes;
- Increase community and stakeholder participation in the implementation of COVID-19 vaccination; and
- Increase the public's willingness to get the COVID-19 vaccination.

The Central Government and Regional Governments in implementing communication strategies can involve stakeholders, community organizations, religious/community leaders, and other health development partners. The Central Government and Local Governments monitor and evaluate communication strategies. In addition to these problems, based on observations, aspects of resources, disposition, and organizational structure are also obstacles in themselves. The resource aspect is reflected in the need for significant financial resources to fund the vaccination activities. The distribution of vaccines in the region is not easy, especially in remote areas such as the Maya islands and the Karimata Islands. Existing human resources, especially health workers, are also inadequate if they have to handle vaccinations from socialization to the implementation of vaccination activities in various sub-districts in the North Kayong region.

The total of Health Workers in Kayong Utara Regency is only 393 people, namely 4 Specialist Doctors, 19 General Practitioners, 3 Dentists, 113 Midwives, 166 Nurses, 23 SKM, 21 Health Careers, 13 Nutritionists, 9 Analysts People, Pharmacy 20 People, and Medical Records 2 People. Health facilities in the area are also still limited, considering that there is only one hospital and eight health centers, with five health centers capable of serving inpatient care ([Dinas Kesehatan dan KB Kab. Kayong Utara, 2021](#)). Therefore, there needs to be cooperation with various parties such as Forkopimda, The Indonesian National Armed Forces - Indonesian National Police, and others. Based on the aspect of disposition, it is also known that the commitment to implementing the vaccination policy is also not the same, so there needs to be an effort to motivate all parties so that the program is successfully implemented according to the target.

## 2 Materials and Methods

To obtain precise and complete data in a study, researchers are required to choose the correct technique. The authors used a data collection instrument in a questionnaire to get comprehensive and objective data. The questionnaire is a data collection technique using a series of questions compiled for the respondent to be answered and assessed. The questionnaire scale used is a Likert scale. Measurement of opinions, attitudes, perceptions of a person and group is part of the Likert scale ([Sugiyono, 2008](#)). There is no doubtful answer choice because "the category has a double meaning, it can be interpreted as not answering, neutral or in doubt ([Hadi, 2004](#)). This category of answers with multiple meanings is not expected in the instrument." Thus, this study uses a modified Likert model scaling by eliminating the middle or doubtful answers. Then each answer to each question is scored as follows:

Table 1  
Likert scale

Mark	Opinion
5	Strongly Agree (SS)
4	Agree (S)
3	Doubtful (RR)
2	Disagree (TS)
1	Strongly Disagree (STS)

Source: Processed by researchers, 2021

Descriptive analysis of the research variables, based on the total average for each question item for each variable of resources, communication, and employee organizational structure in vaccine policy. Before analyzing, first of all, categorization is carried out to determine the research of each indicator. This is categorization based on the lowest score of 1 (strongly disagree) and the highest score of 5 (strongly agree).

Maximum score = 5

Minimum score = 1

Interval = = = 0.80

Categories are defined as follows:

Very high = 4.20 to 5

Tall = 3.40 to 4.19

Currently = 2.60 to 3.39

Low = 1.80 to 2.59

Very low = 1 to 1.79

### 3 Results and Discussions

#### *Communication variables*

Variable communication consists of 7 questions, and the description of these variables can be seen in the following description. The table above shows that the average respondent rated "Medium" to the statement on the communication variable, which is shown from the average value of 2.93.

Table 2  
Variable descriptive analysis communication

No.	Statement	Average Score	Category
1	The communication distribution during the implementation of the COVID-19 vaccination in our district has gone smoothly without any miscommunication.	3.00	Currently
2	Communication during the implementation of the COVID-19 vaccination in our district has gone smoothly even though the transmission has gone through several levels of bureaucracy.	3.06	Currently
3	The communication received by the implementers of the COVID-19 vaccination policy in our district is always clear and not confusing.	2.82	Currently
4	So far, the lack of clarity in the policy message has not hindered our district's implementation of the COVID-19 vaccination policy.	3.00	Currently
5	To a certain extent, the implementers of the COVID-19 vaccination policy in our district can flexibly implement the policy as long as the vaccination objectives are achieved.	2.91	Currently
6	The orders given in implementing the COVID-19 vaccination policy in our district have always been consistent and clear to execute or run.	2.79	Currently
7	The orders are given in the implementation of the COVID-19 vaccination policy in our district rarely change, so there is no confusion for implementers in the field.	2.93	Currently
Average		2.93	Currently

Source: Processed by researchers, 2021

*Resource variable*

The variable resource consists of 6 questions, and the description of these variables can be seen in the following description.

Table 3  
Variable descriptive analysis communication

No.	Statement	Average Score	Category
1	The number of staff in charge of implementing the COVID-19 vaccination policy in our district is sufficient.	2.61	Currently
2	The staff in charge of implementing the COVID-19 vaccination policy in our district are competent in carrying out their duties.	2.89	Currently
3	All staff in charge of implementing the COVID-19 vaccination policy in our district already know what they must do when given orders to take action.	3.05	Currently
4	All staff in charge of implementing the COVID-19 vaccination policy in our district already know that not everyone involved in implementing the policy complies with the law, so there needs to be solid coordination.	3.06	Currently
5	All staff in charge of implementing the COVID-19 vaccination policy in our district have apparent authority.	3.02	Currently
6	Supporting facilities in the form of facilities and infrastructure in implementing the COVID-19 vaccination policy in our district are adequate both in terms of quantity and quality.	2.95	Currently
<b>Average</b>		<b>2.93</b>	<b>Currently</b>

Source: Processed by Researchers, 2021

The table above shows that the average respondent rated "Medium" to the statement on the resource variable, which is shown from the average value of 2.93.

*Disposition Variable*

Variable disposition consists of 4 questions, and the description of these variables can be seen in the following description.

Table 4  
Variable Descriptive Analysis Disposition

No.	Statement	Average Score	Category
1	The implementers of the COVID-19 vaccination policy in our district know what to do and have the ability to implement it.	2.89	Currently
2	The implementers of the COVID-19 vaccination policy in our district are dominated by people who are dedicated to the policy to fulfill the interests of the citizens.	2.96	Currently
3	The appointment and appointment of staff in the bureaucracy implementing the COVID-19 vaccination policy in our district are their abilities, capabilities, and competencies.	2.89	Currently
4	The implementers of the COVID-19 vaccination policy in our district have received adequate incentives.	2.86	Currently
<b>Average</b>		<b>2.90</b>	<b>Currently</b>

Source: Processed by Researchers, 2021

The table above shows that the average respondent rated "Medium" to the statement on the disposition variable, which is shown from the average value of 2.90.

#### *Bureaucratic structure variables*

The variable bureaucratic structure consists of 3 questions, and the description of these variables can be seen in the following description.

Table 5  
Variable descriptive analysis of the bureaucratic structure

No.	Statement	Average Score	Category
1	SOPs in implementing the COVID-19 vaccination policy in our district have been systematically compiled, although in practice, sometimes it must be flexible according to field conditions.	2.85	Currently
2	SOPs in implementing the COVID-19 vaccination policy in our district are structured into routine activities that allow employees (or policy implementers/bureaucrats) to carry out their activities daily according to established standards.	2.85	Currently
3	The COVID-19 vaccination policy in our district has been implemented by many people scattered in various work units in their respective fields.	2.82	Currently
Average		2.84	Currently

Source: Processed by Researchers, 2021

The table above shows that the average respondent rated "Medium" to the statement on the bureaucratic structure variable, which is shown from the average value of 2.84.

#### *Variables vaccination policy implementation*

The buying interest variable is 42 questions (4 questions fall out of 46 questions), covering ten aspects. The description of the variables can be seen in the following description

Table 6  
Variable descriptive analysis of vaccination policy implementation

No.	Statement	Average Score	Category
<b>Planning for COVID-19 Vaccination Needs</b>			
1	Our district's plan for Vaccination needs has been carried out based on the number of targets for both Program Vaccination and Mutual Cooperation Vaccination.	3.08	Currently
2	Vaccination needs plans in our district have been prepared based on the development of the epidemiology of the disease and considerations from the Corona Virus Disease 2019 (COVID-19) Handling Committee in this region.	3.14	Currently
3	Our district's vaccination needs plan includes the procurement of the COVID-19 Vaccine, supporting	3.04	Currently

	equipment, and logistics required to implement Vaccinations for both Program Vaccination and Mutual Cooperation Vaccinations in our region.		
4	Procurement of COVID-19 Vaccines for both Program Vaccinations and Mutual Cooperation Vaccinations in our district has been carried out by the provisions of laws and regulations regarding the procurement of COVID-19 Vaccines.	3.05	Currently
	<b>Average</b>	3.08	Currently
<b>The target of the implementation of the COVID-19 Vaccination</b>			
5	The implementation of the COVID-19 Vaccination in our district has been carried out in stages according to the availability of the COVID-19 Vaccine in our area.	2.57	Currently
6	In implementing the COVID-19 Vaccination in our district, the criteria for the recipient of the COVID-19 Vaccine have been determined according to the indications of Vaccines available from the central government.	3.00	Currently
8	Older people and staff/officers' public services have become one of our district's priority groups, COVID-19 Vaccine recipients.	2.81	Currently
9	Vulnerable communities from geospatial, social, and economic aspects economy have become one of the priority groups of COVID-19 Vaccine recipients in our district.	3.03	Currently
10	Each person in our district can only be registered in one priority group for COVID-19 vaccine recipients.	2.97	Currently
11	To set the target number of Vaccine recipients COVID-19 in our district, we have conducted data collection on the target recipients of the COVID-19 Vaccine, both for Program Vaccination and Mutual Cooperation Vaccination.	2.89	Currently
12	The data collection results on the target recipients of the COVID-19 Vaccine in our district have been published in the Information System for One COVID-19 Vaccination Data.	3.04	Currently
13	The target data in the vaccine receipt information system in our district has been compiled.	3.06	Currently
<b>Distribution of COVID-19 Vaccine, supporting equipment, and logistics</b>			
15	The distribution of supporting equipment and logistics needed to implement the COVID-19 Vaccination in our district has been carried out by distributing suitable medical devices or other standards to ensure quality.	3.00	Currently
16	The distribution of supporting equipment and logistics needed to implement the COVID-19 Vaccination in our district has been carried out by the provisions of the applicable laws and regulations.	3.00	Currently
17	Our district government has been responsibly responsible for the distribution of the COVID-19 Vaccine, supporting equipment, and logistics needed	3.04	Currently



	to implement the Vaccination Program in this region.		
18	Our district government has been responsible for distributing the COVID-19 Vaccine to Health Service Facilities and service posts Vaccination for COVID-19 in our area.	2.94	Currently
	<b>Average</b>	3.00	Currently
<b>Implementation of COVID-19 Vaccination services</b>			
19	The schedule and stages of administering the COVID-19 Vaccine to implement the Vaccination Program in our district have been set by Availability of COVID-19 Vaccines, priority groups of recipients of COVID-19 Vaccines, and types COVID-19 Vaccines.	2.70	Currently
20	Health Service Facilities in our district that provide Vaccination Program Services include Puskesmas and sub-health centers; clinic; hospital; and other health service units.	3.10	Currently
21	Program Vaccination Services in our district, apart from being implemented in health Service Facilities, are also implemented at the COVID-19 Vaccination service post by collaborating/coordinating with Puskesmas, provincial health offices, and district health offices.	3.10	Currently
22	Our district's Mutual Cooperation Vaccination Service is carried out in public/private health care facilities that meet the requirements through cooperation between legal entities/business entities and public/private health service facilities.	3.04	Currently
23	Health Service Facilities in our district in providing services Mutual Cooperation Vaccination has coordinated with the district health office.	2.44	Currently
24	In the context of implementing the Vaccination Program, the Office of Health and provincial health offices have carried out data collection and stipulation of implementing Health Service Facilities and determining the distribution of COVID-19 Vaccines, supporting equipment, and logistics to implement the COVID-19 Vaccination.	3.14	Currently
25	Vaccination Services Programs for priority groups of COVID-19 vaccine recipients in our district are carried out at Health Service Facilities determined by the district health office based on the results of data collection and determination of implementing Health Service Facilities	3.05	Currently
27	The provision of the COVID-19 vaccine in our district has been carried out by doctors, midwives, or nurses who have the competence and authority by the requirements of the legislation.	2.55	Currently
28	Provision of the COVID-19 Vaccine carried out by the midwife or nurse in our district has been carried out under the supervision of a doctor by the requirements of the legislation.	2.58	Currently
	<b>Average</b>	2.86	Currently
<b>Cooperation in the implementation of the COVID-</b>			

<b>19 Vaccination</b>			
29	In implementing the COVID-19 Vaccination, our district government has collaborated with state/regional-owned enterprises or private business entities, professional/social organizations, the Indonesian National Armed Forces/National Police of the Republic of Indonesia, and other parties deemed necessary.	2.44	Currently
30	Our district government has collaborated with all parties to provide support for the provision of health workers; COVID-19 Vaccination place; logistics/transportation; COVID-19 Vaccine warehouse and storage tools including buffer stock/stockpiling; security; as socialization and community mobilization.	3.09	Currently
31	Our district government has collaborated with various parties within the scope of support to provide non-health personnel and medical waste management.	3.05	Currently
32	The regent has optimally coordinated the implementation of the COVID-19 vaccination in our district.	3.04	Currently
<b>Average</b>		2.91	Currently
<b>Monitoring and Overcoming Adverse Events Post-COVID-19 Vaccination</b>			
33	In the event of an Adverse Event after Vaccination COVID-19 in someone who gets vaccinated COVID-19, Health Service Facilities or health offices in our district have recorded and reported as well as investigations by the provisions of laws and regulations	3.02	Currently
34	In the case of an adverse event after the COVID-19 vaccination requires: treatment and care, then in our district, health services have been carried out by medical indications and treatment protocols.	2.68	Currently
35	If there are cases of post-secondary events Vaccinations affected by the COVID-19 Vaccine product based on the results of causality studies and the case caused disability or death will be compensated by the government.	3.03	Currently
<b>Average</b>		2.91	Currently
<b>Communication strategy</b>			
36	In implementing the communication strategy, our district government has involved stakeholders, community organizations, religious/community leaders, and other health development partners.	3.25	Currently
37	Our district government has implemented monitoring and evaluation of communication strategies to increase community and stakeholder participation in the implementation of the COVID-19 Vaccination.	2.89	Currently
<b>Average</b>		3.07	Currently
<b>Recording and reporting</b>			
39	The recording and reporting of the implementation of the COVID-19 Vaccination service in the district have	2.98	Currently

	been done manually or electronically through the System Information on One COVID-19 Vaccination Data.		
40	Recording and reporting are manually inputted by the Health Service Facility or our district health service officer into the COVID-19 Vaccination One Data Information System using existing facilities at the district health office.	3.02	Currently
	<b>Average</b>	3.00	Currently
	<b>Funding</b>		
41	Funding for the implementation of the Vaccination Program shall be borne by the State and Regional Revenue and Expenditure Budgets.	3.14	Currently
42	Funding for the implementation of Gotong Royong Vaccination in our district is charged to the legal entity/business entity that carries out the Mutual Cooperation Vaccination.	2.91	Currently
43	Funding for monitoring and response Adverse Events Post-COVID-19 Vaccination in our district is charged to the State Revenue and Expenditure Budget.	3.05	Currently
44	Funding for health services for COVID-19 Vaccine recipients in our district who experience health problems due to Adverse Events after COVID-19 Vaccination is charged to the Ministry of Health budget or the National Health Insurance program organized by the Health Social Security Administering Body by the provisions of laws and regulations.	3.01	Currently
	<b>Average</b>	3.03	Currently
	<b>Guidance and supervision</b>		
45	The district health office has provided guidance and supervision of the implementation of the COVID-19 vaccination in our district in collaboration with other agencies.	2.91	Currently
46	In the context of fostering and supervising the implementation of the COVID-19 vaccination in the district, periodic and continuous monitoring and evaluation have been carried out on the implementation of the COVID-19 Vaccination.	2.95	Currently
	<b>Average</b>	2.93	Currently

Source: Processed by Researchers, 2021

The table above shows that the average respondent rated "Medium" to the statement on the variable of vaccination policy implementation, which is shown from the average value of 2.95.

#### *Multiple Linear Regression Analysis*

The data that has been obtained is then analyzed by researchers through multiple linear regression analysis to determine the relationship between the independent variable and the dependent variable. Based on the results of data processing obtained from the SPSS program, it can be seen the magnitude of the regression coefficient value. The value of each regression coefficient can be seen in the following table:

Table 7  
T-Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,069	13,799		,150	,881
	X1	1,382	,330	,317	4,190	,000
	X2	2,092	,476	,335	4,394	,000
	X3	2,378	,854	,260	2,784	,006
	X4	3,409	,974	,333	3,498	,001

a. Dependent Variable: Y

Source: Processed by Researchers, 2021

Based on Table 7 above, the preparation of the multiple linear regression equation is then carried out based on the value of the regression coefficient ( $\beta$ ), namely:

$$Y = 2,069 + 1,382X1 + 2,092.X2 + 2,378.X3 + 3,409.X4$$

The t-test in this study was carried out as an effort to test the significance level of the influence of communication (X1), resources (X2), disposition (X3), and bureaucratic structure (X4) partially influencing the implementation of vaccination policy (Y). The individual parameter significance test (t-test) in this study uses a 95% confidence level or value (0.05). If the significance of t count  $\leq$   $\alpha$ (0.05), then the independent variable affects the dependent variable, and if the importance of t count  $>$   $\alpha$ (0.05) then the independent variable does not affect the dependent variable.

- Communication variable (X1), has a significance value (0.000)  $<$   $\alpha$ (0.05), so  $H_0$  is rejected. The communication variable has a significant influence on the implementation of the vaccination policy.
- The resource variable (X2), has a significance value (0.000)  $<$   $\alpha$ (0.05), so it is rejected. From these results, it can be seen that the resource variable has a direct effect on the implementation of public policy in the form of vaccination.
- Disposition variable (X3), has a significance value (0.006)  $<$   $\alpha$ (0.05), so it is rejected. The disposition variable has impacted the implementation of the vaccination policy.
- The bureaucratic structure variable (X4), has a significance value (0.001)  $<$   $\alpha$ (0.05), so  $H_0$  is rejected. The bureaucratic structure variable has impacted the implementation of the vaccination policy.

Testing the F value is done by showing the goodness of fit model, which essentially measures the model's effectiveness. If the significance level value  $\leq$  0.05, it is concluded that the regression equation model in this study is fit. The summary of the test results for the F value is presented in the following table.

Table 8  
Multiple Linear Regression F Test Results

		ANOVA <sup>b</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20908,405	4	5227,101	21,709	,000 <sup>a</sup>
	Residual	22874,355	95	240,783		
	Total	43782,760	99			

a. Predictors: (Constant), X4, X1, X2, X3

b. Dependent Variable: Y

Source: Processed by Researchers, 2021

Based on the test results, the calculated F value is 21.709, with a 0.000 level of significance. The regression equation model in this study can demonstrate the goodness of the fit model, meaning communication (X1), resources (X2), disposition (X3), and bureaucratic structure (X4) together, with a probability (0.000) less than 0.05. -equal influence on vaccination policy implementation (Y). The following is a summary of the coefficient of determination test results.

Table 9  
Results of Coefficient of Determination of Multiple Linear Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691 <sup>a</sup>	.478	.456	15,517

a. Predictors: (Constant), X4, X1, X2, X3

Source: Processed by Researchers, 2021

In Table 9 above, it can be seen that the R number of 0.691 indicates that there is a correlation or relationship between the implementation of vaccination policies and the four independent variables. The R Square figure of 0.478 means that 47.8% of the variation in the implementation of the vaccination policy can be explained by the interpretation of the four independent variables. The magnitude of the influence of communication (X1), resources (X2), disposition (X3), and bureaucratic structure (X4) together affect the implementation of vaccination policy (Y) is 47.8%.

#### *Effect of communication on vaccination policy implementation*

This study indicates that communication has a positive and significant effect on the implementation of vaccination policy in the North Kayong Regency. If communication increases, the implementation of vaccination policy will also increase, but if communication decreases, the implementation of vaccination policy will also decrease. An essential requirement for effective policy implementation is that those making the decisions must know what to do. Submission of policies that will be implemented to staff or employees who will carry out the task is important because they will carry out the task. Efforts to create good communication in carrying out financial administration by government officials.

This is done to reduce errors in policy implementation. The communication referred to in this study is the coordination and socialization carried out to implement the vaccination policy. Coordination is one aspect that determines the success of a policy; this coordination helps control the performance results of employees. Socialization is carried out by holding pieces of training to implement vaccination policies (Barker & Kilner, 1994; Leitner, 1996).

The results of this study indicate the resource positive and significant effect on the implementation of vaccination policy in the North Kayong Regency. If resources increase, the implementation of vaccination policy will also increase, but if communication decreases, the implementation of vaccination policy will also decrease. Resources are the most crucial factor in implementing procedures to run effectively and efficiently. Without resources, policies will not run smoothly and will not meet the indicators that have been set. Resources can be interpreted in various elements, such as human resources as implementers and financial resources as implementation support. The needles used to see how resources to influence policy implementations are human resources and infrastructure (Grol & Grimshaw, 2003; Beasley et al., 2005).

Implementation has various factors for successful implementation, one of which is human resources. Although the policies to be implemented have been conveyed properly and consistently, if those implementing them have a lack of resources to implement them, the policies will also not work well. Resources that can support the implementation of policies can be tangible, namely infrastructure and human resources. Vaccination policy implementers in North Kayong Regency have improved human resources by organizing training. In addition, several employees are included in comparative studies to gain experience in implementing vaccination policies.

### *Effect of disposition on the implementation of vaccination policy*

The findings of this study indicate that vaccination policy implementation in the North Kayong Regency has positive and significant effects. If the disposition improves, so will the performance of the vaccination policy; conversely, if the disposition deteriorates, so will the implementation of the vaccination policy (Noble, 1999). An executor's personality and nature vary, such as commitment, honesty, and democracy. If the implementer has a positive attitude, the policy will be implemented effectively and follow the policymaker's objectives.

One of the factors that influence policy implementation is the attitude of the implementor or apparatus. If the device agrees with the contents of the policies they are implementing, it will happily implement them. Still, if their views are different from those of the policymakers, the implementation process will experience many problems, and the programs that have been made will not be achieved. Disposition in this study is intended as a tendency, desire, or agreement of the implementers to implement the policy. The level of awareness of the implementers in carrying out the policies of the employee performance improvement program is good; this can affect the success of the policies implemented.

### *Effect of bureaucratic structure on the implementation of vaccination policy*

This study illustrates that the bureaucracy has a positive effect and has a major impact on the implementation of the COVID-19 vaccination policy, especially in North Kayong. The bureaucratic structure is a structure that has the task of implementing the policies given by the government. What makes this a success is the preparation of detailed tasks, service procedures that form the basis for implementing policies. Furthermore, a small structure has a low risk of weakening complicated supervision and bureaucracy, on the contrary, a long organizational structure tends to be complicated and complex.

The bureaucratic structure is a fundamental factor in reviewing the implementation of public policy. The bureaucratic structure as the implementer of the policy has an essential role in the policy of the employee performance improvement program. The implementation of the vaccination policy in the North Kayong Regency is related to the Standard Operating Procedure (SOP) and whether it is structured according to the applicable procedures/SOPs or guidelines so that the implementation is structured.

## **4 Conclusion**

Based on the findings of the preceding research and data analysis, the following conclusions can be drawn: (1) There is a partial influence of communication, resources, disposition, and bureaucratic structure on vaccination policy implementation in the North Kayong Regency; (2) There is a simultaneous (joint) influence of communication, resources, disposition, and bureaucratic structure on vaccination policy implementation in the North Kayong Regency; (3) The alternative strategy implemented in the COVID-19 Vaccine Program in North Kayong Regency is an advocacy strategy. Advocacy is intended as a strategic and integrated action carried out, both by individuals and community groups by including problems with the policy agenda and controlling decision-makers to seek solutions while building the base of support for the enforcement of public policies made to address issues related to the COVID-19 Vaccine Program in North Kayong Regency; and (4) The strategy is carried out in 2 stages: the target audience's analysis stage and the Action stage. Advocacy efforts are carried out by delivering social campaigns and coordination between agencies to garner commitment, concrete support, and active participation from regional leaders at the provincial level (governors), regional leaders at the district/city level (regents/mayors), and leaders and members of DPRD at the local level and districts/cities, decision-makers from relevant cross-sectors.

Suggestions that can be given based on the results of this study are as follows: (1) Leaders of vaccination policy implementers in the North Kayong Regency can find funds to increase human resources and infrastructure to facilitate vaccination; and (2) For further researchers, it is recommended that research be developed into other variables that are suspected of influencing the implementation of vaccination policy with a more in-depth analysis.

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## References

- Astrachan, J. H. (2010). Strategy in family business: Toward a multidimensional research agenda. *Journal of Family Business Strategy*, 1(1), 6-14. <https://doi.org/10.1016/j.jfbs.2010.02.001>
- Barker, J., & Kilner, M. (1994). The coordination chemistry of the amidine ligand. *Coordination chemistry reviews*, 133, 219-300. [https://doi.org/10.1016/0010-8545\(94\)80059-6](https://doi.org/10.1016/0010-8545(94)80059-6)
- Beasley, M. S., Clune, R., & Hermanson, D. R. (2005). Enterprise risk management: An empirical analysis of factors associated with the extent of implementation. *Journal of accounting and public policy*, 24(6), 521-531. <https://doi.org/10.1016/j.jaccpubpol.2005.10.001>
- Blackman, A., Ibáñez, A. M., Izquierdo, A., Keefer, P., Moreira, M. M., Schady, N., & Serebrisky, T. (2020). Public Policy to Tackle COVID-19: Recommendations for Latin America and The Caribbean. Washington DC: Inter-American Development Bank
- Buşmachi, E., & Ursu, V. (2012). Public Policies and Strategies to Enhance The Economic Potential of A Country. Case of Moldova. *Journal of Public Administration, Finance and Law*, 1(1), 17—30.
- Casadesus-Masanell, R., & Ricart, J. E. (2010). From strategy to business models and onto tactics. *Long range planning*, 43(2-3), 195-215. <https://doi.org/10.1016/j.lrp.2010.01.004>
- Cochran, C. L. & Malone, E. F. (2014). Public Policy: Perspectives and Choices. USA: Lynne Rienner Publishers.
- Dinas Kesehatan dan KB Kab. Kayong Utara. 2021. Evaluasi Program SIK Dinas Kesehatan dan KB Kab. Kayong Utara. Kayong Utara: Dinas Kesehatan dan KB Kab. Kayong Utara.
- Dinas Kesehatan Provinsi Kalimantan Barat. (2021). Capaian Vaksinasi Provinsi Kalimantan Barat 2021. Dinas Kesehatan Provinsi Kalimantan Barat.
- Elyta, & Martoyo. (2021). Public Policy and Indonesian Diplomacy for the Acceleration of International Goods Terminal Development. IEOM Society International, 2573–2582.
- Fischer, F., & Miller, G. J. (Eds.). (2017). *Handbook of public policy analysis: theory, politics, and methods*. Routledge.
- Grol, R., & Grimshaw, J. (2003). From best evidence to best practice: effective implementation of change in patients' care. *The lancet*, 362(9391), 1225-1230. [https://doi.org/10.1016/S0140-6736\(03\)14546-1](https://doi.org/10.1016/S0140-6736(03)14546-1)
- Hadi, S. (2004). Metode Penelitian Research, Fakultas Psikologi UGM, Yogyakarta.
- Hills M. (2021). Covid Vaccine Rollout Gives US Hope Amid Variant Concerns.
- International Monetary Fund. (2020). IMF World Economic Outlook. Chapter 2: Dissecting the Economic Effects.
- Johanson, J. E., & Vakkuri, J. (2019). Strategy and Performance. In *Strategy Formation and Policy Making in Government* (pp. 163-186). Palgrave Macmillan, Cham.
- Kartikasari, W., & Elyta, E. (2021). West Kalimantan Border: How Tough Is it To Deal with the Covid-19 Pandemic?.
- Leitner, W. (1996). The coordination chemistry of carbon dioxide and its relevance for catalysis: a critical survey. *Coordination chemistry reviews*, 153, 257-284. [https://doi.org/10.1016/0010-8545\(95\)01226-5](https://doi.org/10.1016/0010-8545(95)01226-5)
- MC Kab Kayong Utara. (2021). Puskesmas Sukadana Kabupaten Kayong Utara Melakukan Vaksinasi di 10 Desa. Info Publik.
- McConnell, A., & Stark, A. (2021). Understanding policy responses to COVID-19: the stars haven't fallen from the sky for scholars of public policy. *Journal of European Public Policy*, 28(8), 1115-1130.
- Noble, C. H. (1999). The eclectic roots of strategy implementation research. *Journal of business research*, 45(2), 119-134. [https://doi.org/10.1016/S0148-2963\(97\)00231-2](https://doi.org/10.1016/S0148-2963(97)00231-2)
- OECD. (2021). Government at a Glance 2021. OECD Publishing, Paris.
- Omale, S. A. & Daniel, I. M. (2016). Strategic Management of Government Public Policy: Key for Economic Stability. *Journal of Advanced Management and Accounting Research*, 3(7), 43—51.
- O'Toole Jr, L. J. (2000). Research on policy implementation: Assessment and prospects. *Journal of public administration research and theory*, 10(2), 263-288.
- Perrin, E. M., Flower, K. B., Garrett, J., & Ammerman, A. S. (2005). Preventing and treating obesity: pediatricians' self-efficacy, barriers, resources, and advocacy. *Ambulatory Pediatrics*, 5(3), 150-156. <https://doi.org/10.1367/A04-104R.1>
- Sandberg, W. R., & Hofer, C. W. (1987). Improving new venture performance: The role of strategy, industry structure, and the entrepreneur. *Journal of Business venturing*, 2(1), 5-28. [https://doi.org/10.1016/0883-9026\(87\)90016-4](https://doi.org/10.1016/0883-9026(87)90016-4)

- Sotirov, M., & Memmler, M. (2012). The Advocacy Coalition Framework in natural resource policy studies—Recent experiences and further prospects. *Forest policy and economics*, 16, 51-64. <https://doi.org/10.1016/j.forpol.2011.06.007>
- Sugiyono, M. (2008). Penelitian Kuantitatif Kualitatif dan R&D. *Bandung: Alfabeta*.
- Waterston, T., & Haroon, S. (2008). Advocacy and the paediatrician. *Paediatrics and Child Health*, 18(5), 213-218. <https://doi.org/10.1016/j.paed.2008.02.001>

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