



Determinants of action to obtain the covid-19 vaccine in the Moi indigenous community

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ARTICLE INFO

Article history:

Received Apr 05, 2025

Revised Apr 10, 2025

Accepted Apr 22, 2025

Keywords:

Indigenous peoples;

Knowledge,

Perceptions;

Vaccines.

ABSTRACT

The covid-19 virus is one of the most dangerous diseases today, due to the high number of cases and deaths. Efforts that can be made for prevention are vaccines. However, only 42.54% of all vaccine targets in West Papua Province have received the complete vaccine. The community argues that this vaccine is not in accordance with customs, religion, accelerates death. the purpose of this study was to determine the determinants of action to get the covid-19 vaccine in the Moi indigenous people. This study was conducted with a cross sectional approach, which was conducted at the Aimas Convention Centre Hotel, Sorong Regency. The study population was all participants in the Moi Tribe's traditional trial activities in Greater Sorong and a sample of 234 people. Data were collected using a questionnaire and analysed using the Spearman Rank test. The test results showed that knowledge p-value 0.000 (there is an influence), vaccine ability confidence 0.687 (no influence), socialisation impact 0.017 (there is an influence) and perception 0.355 (no influence). It is hoped that the indigenous community management board will collaborate with the local health office in an effort to provide counselling on the importance of the covid-19 vaccine.

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1. Introduction

In early 2020, globally, the world was shocked by the outbreak of a respiratory disease, namely the Covid-19 virus. This covid-19 virus attacks all countries in the world. The virus has attacked 768,983,095 sufferers, 6,953,743 victims died worldwide (World Health Organization, 2021). Meanwhile, in Indonesia, the number of sufferers is 4,254,443 cases and 143,766 cases died (Dirjen Pencegahan dan Pengendalian Penyakit Kemenkes RI, 2021). The number of cases is increasing both in Indonesia and globally, because currently the covid-19 virus is one of the most dangerous diseases as evidenced by the high number of cases and deaths.

There are many efforts have been made by the Indonesian government to reduce the impact of this virus such as the implementation of large-scale social restrictions (PSBB), the implementation of restrictions on community activities (PPKM) and the provision of vaccines for all Indonesian people. Given the large impact of the virus on human health, WHO, especially the Indonesian government, provides a vaccine to produce special protection against covid-19 disease. This vaccine consists of 2 stages, namely doses 1, 2 and 3. Receiving this vaccine is mandatory for people aged 18 years and over with no complications or diseases that are contraindications to receiving the vaccine. Vaccine itself is the production of materials using living organisms that are made to increase the body's immunity to disease. Vaccines consist of attenuated disease-causing microorganisms and some components found in microorganisms such as DNA or RNA (Apriani & Dewi, 2022).

The policy given by the government is that vaccines must be given to all people, but many people refuse to give the vaccine. Some of the reasons why people refuse vaccines are the many hoax issues about vaccines that cause pros and cons if vaccines are dangerous for human health, the harmful effects and side effects of vaccines, vaccines and vaccines contain tracking devices or chips, and the issue that vaccines contain pig oil, so that people think that vaccines are dangerous and they are not willing to be vaccinated. In addition, the government's actions that did not conduct socialisation and immediately implemented this vaccination seemed to be in a hurry, where there was no valid proof of the usefulness of the covid-19 vaccine (Fauzia & Hamdani, 2021).

In addition, it also seems that the government has an intention to seek economic benefits from the vaccination programme, in addition to customary factors, certain religions that say vaccines are not in line with religious teachings, there is a fear of the adverse effects of vaccine drugs not healing or providing immunity but accelerating death for people who receive vaccines. The government's efforts to provide immunity or prevent covid 19 transmission have been stipulated in the Presidential Regulation of the Republic of Indonesia Number 14 of 2021 concerning Amendments to Presidential Regulation Number 99 of 2020 concerning Procurement of Vaccines and Implementation of Vaccinations in the Context of Combating the 2019 Corona Virus Disease (Covid-19) Pandemic Article 13 a paragraph (2) Covid-19 vaccination is an obligation for all people in Indonesia who have been designated as target recipients of covid 19 vaccines that have been recorded by the Minister of Health (Ayunda et al., 2021).

People are not convinced of the covid vaccine based on questions that arise about side effects, safety, efficacy and timing of vaccine administration. For this reason, individuals or groups who are not vaccinated or incomplete vaccines will be found (Li et al., 2022). Although certain individuals or groups consider that covid is a respiratory disease and the most effective measure to prevent transmission is through vaccines. The elderly, people with congenital diseases and weak immunity are vulnerable groups that are prioritised to get vaccines (Liu et al., 2022). Given that covid is a contagious respiratory disease, vaccines are given to all community groups. For this reason, it is necessary to conduct research that aims to determine community participation in getting the covid-19 vaccine, especially related to different locations with economic status and ethnicity (Mohamed et al., 2021).

Currently, the number of people in West Papua Province who have received a complete vaccine is 42.54% of the target achievement. The administration of the covid-19 vaccine is carried out evenly for all Indonesian people including West Papua Province, consisting of one city and five districts which include; Sorong City, Tambraw Regency, Sorong Regency, Maybrat Regency, Raja Ampat Regency and South Sorong Regency.

The Moi indigenous people who occupy the Greater Sorong area, namely Sorong City, Sorong Regency, Maybrat, Raja Ampat, are one of the major tribes in Indonesia. Some of these indigenous people at the beginning of the covid-19 vaccine entering the Land of Papua had responded to the rejection of acceptance on the grounds that because this vaccine was still part of the trial so it could not be trusted, it would hasten death for recipients, vaccines were not included in tribal culture and customs, however, many members of the indigenous community accepted the vaccine so they were willing to get vaccines both doses 1, 2 and 3. Kinship between individuals of the Moi tribe is very close so that this kinship is a determining factor in determining an action, especially the acquisition of the covid-

19 vaccine. For example, an individual obtains information from the media about the number of covid-19 cases, victims, and the impact of the covid-19 vaccine, then that person will convey this information to the entire closest family so that the whole family feels scared or scary which causes them to choose not to get the vaccine. Even though the government, traditional leaders and health workers have provided information and approaches so that the person gets the COVID-19 vaccine because it has many benefits compared to side effects.

To facilitate the implementation of the covid-19 vaccine in Sorong City and Sorong Regency, the government provides places that are easily accessible to the community in addition to health centers and related agencies. In addition to providing locations that make it easier to reach, the government and related agencies also provide food assistance which is used as a support in the implementation of vaccines, but it is known that there are still many people who have not received vaccines. Based on the description above, it is necessary to conduct research that aims to find out what determinants affect the acceptance of the covid-19 vaccine in the indigenous people of the Greater Sorong Moi Tribe.

2. Methods

This study is an analytical study with a cross sectional approach. Which was carried out at the Aimas Convention Centre Hotel Sorong Regency in 2022. The population of this study were all participants in the activities of the Moi tribal customary court in Greater Sorong as many as 1,000 people, with a sample size of 234 people. The sampling technique is simple random. Through approaching the customary chiefs of each region, then obtaining participant identity data to be randomized so that participants are obtained. The criteria for being a respondent are willing to participate, able to read and write well, fill out the questionnaire completely. Data were collected using a modified questionnaire, questions about knowledge adopted by (Zega, 2021), questions about perception using the Covid-19 vaccine acceptance survey questions (Kementerian Kesehatan RI, 2020), questions about vaccine ability beliefs (Putra, 2021). The data obtained were analysed using the Spearman Rank test with a confidence level of 0.05.

3. Results and Discussion

Tabel 1
Distribution of Respondent Characteristics in the Moi Indigenous Community Greater Sorong (n= 234)

Characteristics	Frequency (f)	Percents (%)
Umur		
17 - 25 years	23	9,8
26 - 35 years	55	23,5
36 - 45 years	76	32,5
46 - 55 years	42	17,9
56-65 years	27	11,5
Over 65 years	11	4,7
Gender		
Male	152	65,0
Female	82	35,0
Education		
Elementary	30	12,8
Junior High	28	12,0
High School	91	38,9
College	85	36,3
Occupation		
Not working	66	28,2
Civil servant/police/soldier	57	24,4
Fisherman	11	4,7
Farmer	58	24,8
Self-employed	24	10,3
Employed	12	5,1
Ustad/pastor	5	2,1
Driver	1	0,4

Based on the above characteristic table based on age, it is known that the most respondents are in the 36-45 year group as many as 76 people (32.5%) and the least is the age group over 65 years as many as 11 people (4.7%). Based on gender, the most are 152 people (65.0). Based on education, the most is high school education, namely 91 people (38.9%) and the least is junior high school education, namely 28 people (12.0%). Meanwhile, based on the occupation of the respondents, the most were not working, namely 66 people (28.2%) and the least were drivers / motorbikes, namely 1 person (0.4%).

Tabel 2
Distribution of Knowledge, Belief in vaccine capability, Impact of socialisation, Perception and Actions to get vaccinated in the Greater Moi Tribe of Sorong (n=234)

Characteristics	Frequency (f)	Percents (%)
Knowledge		
Less	35	15,0
Fair	106	45,3
Good	93	39,7
Vaccine capability Trustworthy		
Less of trustworthy	145	62,0
Trustworthy	89	38,0
Impact of socialisation		
No	30	27,8
Availabel	169	72,2
Perception		
Less	121	51,7
Good	113	48,3
Actions to get the vaccine		
No vaccine	80	34,2
Get vaccine	154	65,8

Based on the table above, it is known that based on the knowledge of the respondents, the most respondents were sufficient knowledge, namely 106 (45.3%), the trustworthy in the ability of the vaccine with the category of less of trustworthy was more, namely 145 people (62.0%), more perceptions were unfavourable, namely 121 people (51.7%) and the most action to get the vaccine was to get the vaccine as many as 154 people (65.8%).

Tabel 3
Influence of Knowledge, Belief in Vaccine Capability, Impact of Socialisation and Perception on Actions to Obtain Vaccines in the Indigenous Moi Tribe of Greater Sorong

Variable	Actions to get the vaccine				Among		p-value
	No vaccine		Get vaccine		f	%	
	f	%	f	%			
Knowledge							
Less	21	60,0	14	40,0	35	100,0	0,00
Fair	40	37,7	66	62,3	106	100,0	
Good	19	20,4	74	79,6	93	100,0	
Vaccine capability Trustworthy							
Less of trustworthy	51	35,2	94	64,8	145	100,0	0,687
Trustworthy	29	29,5	60	70,5	85	100,0	
Impact of socialisation							
There is no	30	46,1	35	53,9	65	100,0	0,017
There is not	50	29,6	119	70,4	169	100,0	
Perception							
Less	38	31,4	83	68,6	121	100,0	0,355
Good	42	37,2	71	62,8	113	100,0	
Total	80	34,2	154	65,8	234	100,0	

In table 3 above, it is known that based on knowledge, out of 35 people with poor knowledge, 21 people (60%) did not get the vaccine, out of 106 people with sufficient knowledge, 40 people (37.7%) did not get the vaccine and out of 93 people with good knowledge, 19 people (20.4%) did not get the

vaccine. The results of statistical tests using the Spearman Rank test showed a p-value of 0.000 and $< \alpha$ (0.05), so it was concluded that there was an effect of knowledge on the act of getting vaccinated.

The results of the analysis test show that knowledge has an influence on the action of getting the covid-19 vaccine. Vaccines are one of the most effective and economical ways to prevent infectious diseases. So it is necessary to make vaccine development more effective to weaken corona virus infection (Febriyanti et al., 2021). Respondents' knowledge is one of the factors that facilitate behaviour change, especially in vaccinating covid-19 (Azim et al., 2021). Receiving the covid vaccine is a positive sign of having good knowledge of covid-19 (Viswanath et al., 2021).

A person's good knowledge will result in a good action and vice versa, poor knowledge will result in poor action. Good knowledge possessed by respondents is obtained from the surrounding environment such as family, neighbours, workmates and also information obtained from media such as social media, electronics (television-radio) and banners or writings that can be found in the surrounding environment. The results of this study are in line with (Rosiana et al., 2022).

The researcher's assumption, in theory, people know that information can come from education, namely the higher the level of education, the more they learn and get lessons such as new information. This is evident from the results of the study that the majority of respondents with high school education and higher education. With a high education, it is easier for a person to understand in receiving information so that it is applied.

Based on the trustworthy in the ability of the vaccine, out of 145 people in the category less of trustworthy, 51 people (35.2%) did not get the vaccine, out of 89 people in the category of trustworthy 29 people (32.6%) did not get the vaccine. The results of statistical tests with a known p-value of 0.687 and $> \alpha$ (0.05), it is concluded that there is no effect of belief in vaccine capabilities on the act of getting vaccinated.

Based on the results of the study, it is known that the majority of respondents do not believe in the ability of vaccines, and the results of data analysis concluded that there is no effect of belief in the ability of vaccines on the act of getting vaccines. In doing something, especially when it comes to one's life, it must be based on trust or confidence in the results and impact of what is done, if you are not sure or doubtful, someone will delay or refuse.

A person's trust in the ability of a vaccine can be determined by information about the vaccine, such as the main ingredients, benefits and functions as well as data on the satisfaction received from the vaccine. A person's trust will increase if the information in question is accurate and complete. There is a lot of unclear news or information about the existence of vaccines organised by the government, during 2020 there were 10 hoax information related to vaccines (Priastuty et al., 2020) and this situation can affect people's actions in getting vaccines, even though the current data on the number of covid-19 sufferers and victims has decreased.

The government guarantees the safety of people who get vaccinated (Ayunda et al., 2021), saying that the government provides protection for the public from side effects after the implementation of covid-19 vaccination. The side effects of the commonly used Pfizer-BioNTech mRNA brand vaccine are localised (Ganesan et al., 2022). As for workers, the vaccine gives side effects of sweating, fatigue, body aches, headaches that appear in the first and second doses. This situation can cause an increase in absenteeism because they feel they need rest (Chrissian et al., 2020).

Based on the impact of socialisation, out of 65 people with the no category, 30 people (46.1%) did not get the vaccine, out of 169 people with the existing category, 50 people (29.6%) did not get the vaccine. Statistical test results with a known p-value of 0.017 and $< \alpha$ (0.05), it is concluded that there is an influence of the impact of socialisation on the action of getting vaccinated.

The results of data analysis showed that the majority of respondents said that as an impact of the socialisation of the covid-19 vaccine, they believed. And based on the statistical test analysis, it was found that there was an influence of the impact of socialisation on the action of implementing the covid-19 vaccine. Socialisation is an effort to provide information related to the aims and objectives carried out as a form of action to provide information to the general public.

Health socialisation is a health education activity that is carried out by spreading messages, instilling confidence, so that the community is not only aware, knows and understands, but also wants and can do a recommendation that has to do with health, because the purpose of health socialisation is to achieve the goal of healthy living by influencing community behaviour individually or in groups. Vaccine socialisation is an effort to provide information and government policies in increasing vaccine acceptance, but the way this socialisation will affect people's understanding of the trust in vaccines provided by the government (Marwiyah et al., 2021), namely by combining socialisation material with local wisdom such as combining material with cases that occur in the community. The results of this study are supported by (Batubara, 2022) who said that socialisation will have an impact on vaccine acceptance because this socialisation will be one of the determining factors for someone deciding to accept a vaccine or not. The provision of promotion or socialisation of the covid-19 vaccine must reach all communities and their layers without exception, both in rural and urban areas (Fasiku et al., 2024).

Indonesia consists of various cultures and beliefs, which will lead to various assumptions about the vaccine itself. For this reason, policies related to public health are needed by considering the population, beliefs and culture, and people's attitudes towards vaccines. So that the target of the vaccine is right which will help the achievement of health policies that will produce better results. Actions taken in the form of increased communication, education, health promotion and social mobilisation through approaches to community leaders and religious leaders at special meetings in a comprehensive manner can help increase the success of vaccine administration programs, especially in working groups (Shembesh et al., 2025).

Based on the perception of 121 people with a perception category of less there were 38 people (31.4%) who did not get the vaccine, out of 113 people with a good perception category there were 42 people (37.2%) who did not get the vaccine. The results of statistical tests with a known p-value of 0.355 and $> \alpha$ (0.05) concluded that there was no effect of perception on the act of getting vaccinated.

Based on the results of data analysis, it is known that there is no effect of perception on the action of getting vaccines. a process of identifying something using the five senses. In conveying information, especially about health, a person's perception of something is the most important thing to improve, because this is what can affect the success in conveying information. The WHO has stated that vaccine hesitancy is a global threat and that lack of trust in vaccination and inconvenience in accessing are the two main factors contributing to hesitancy and reluctance to vaccinate. Various studies mention that the factors of acceptance of vaccination are very diverse, namely; the availability of vaccines providing vaccines for free, Perceptions, expectations, and motivational factors that people need to get vaccinated differ according to age, gender, marital status, income level, and employment status, history of receiving influenza vaccines, likelihood of contracting infections, level of trust in institutions, personal beliefs about vaccine safety, lack of evidence of vaccine effectiveness as the main reasons and effects of vaccines (Agustiningsih et al., 2022).

Many people have a good perception of the covid-19 vaccine that the vaccine can protect themselves from complications and transmission of covid-19 disease. However, either their family or themselves are not willing to be vaccinated because they are worried about the side effects and effectiveness of the vaccine. Particularly related to religious beliefs, individuals who are Muslims tend to doubt the strength of the vaccine compared to other religions. this doubt has a chance of 2.46 times (Idris et al., 2023).

The researcher's assumption, as is well known, at the beginning of the Covid-19 pandemic, namely 2020-2021, the Indonesian government imposed work from home and activity restrictions, due to the dangers of the virus, but the community underestimated and did not fully implement health protocols according to the rules. Including the acceptance and implementation of this vaccine, many people have not received the vaccine and even refused to be vaccinated. This study was conducted after normal conditions, but this situation is not an indication that the covid virus is gone or cured from individuals or communities. Because this virus will be able to re-emerge, especially in groups that have comorbid conditions, it is hoped that all people will remain vigilant and always adopt healthy living behaviours.

4. Conclusions

Poor knowledge and the impact of socialization are important elements in determining vaccination actions in the Greater Moi Sorong Indigenous Community. It is expected that there will be support from the customary council in working with the health office in each region for efforts to provide counseling on the importance of the Covid-19 vaccine to prevent and reduce the spread and risk of Covid-19 disease so that all eligible indigenous people get complete vaccinations. The expected support is to invite health workers to provide health counseling in official meetings and other activities, and also to provide examples and encouragement to the community so that people are willing to be vaccinated.

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