

Original Research Paper

Community Acceptance Assessment of the Covid-19 Vaccination Program in the South Kalimantan Region

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Abstract: Conducting an effective Covid-19 vaccine is a global public health necessity in containing the pandemic. Vaccines are one of the most reliable and cost-effective public health interventions ever implemented that are saving millions of lives each year. The purpose of this study was to identify public acceptance of the Covid-19 vaccination program in the South Kalimantan region. Quantitative research by using a cross-sectional approach. The number of samples is 252 people. The sampling technique is accidental sampling. The study was conducted in South Kalimantan Province, Indonesia. Predictors of acceptance of the vaccine program were identified from vaccination status, views on vaccine effectiveness, vaccine safety, pandemic conspiracy, trustworthiness of information about Covid-19, and willingness to pay for vaccines. Data collection was done online using a Google Form questionnaire. Based on the predictors of acceptance of the covid-19 vaccination program, it can be seen that the majority support the vaccination program in helping prevent the transmission of Covid-19.

Keywords: Covid-19, Vaccination Program, Vaccines.



1. Introduction

At the end of 2019 the corona virus emerged and became a serious concern for all countries. Until then it became a pandemic because of its rapid spread and such a significant impact. The covid-19 virus is transmitted through droplets that spread when coughing, sneezing, or talking [1].

Covid-19 is a virus that attacks the human respiratory tract which causes high fever, which has had an impact on various aspects of life, in particular, has claimed many lives. Based on data from the Covid-19 handling task force, up to 113,664 people died in 34 provinces and 1694 people in South Kalimantan Province [2] [3].

The purpose of this research article is to determine public acceptance of the Covid-19 vaccination program in the South Kalimantan region. Predictors of vaccine program acceptance were identified from vaccination status, views of vaccine effectiveness, vaccine safety, pandemic conspiracy, reliability of information about Covid-19, and willingness to pay for vaccines.

2. Literature Review

Another impact of Covid-19 pandemic is felt in the economic field, which is felt by many economic actors. How the economic development in the period of the end of 2019 and throughout 2020 became a scourge for all mankind in the world [4]. This is because many companies are starting to falter (people's purchasing power is declining), economic growth is weakening, exports and imports are declining, even worse, some media predict a global recession that will be more severe than the 2008 global financial crisis.

Another impact that is so real is that many workers are laid off. Based on data from the Ministry of Manpower during the Covid-19 pandemic, it was recorded that 114,340 companies had terminated employment (PHK) and laid off workers with a total of 1,943,916 people [5]. In addition, the impact of Covid-19 also affects various other fields, such as education which must implement learning from home, tourism which must be closed, worship being restricted, and so on [6].

Many efforts have been made by the government in suppressing the impact of Covid-19, starting from March 2020 the government through the president announced the implementation of social distancing policies, until then large-scale social restrictions (PSBB) were carried out which have now changed to the Enforcement of Community Activity Restrictions (PPKM), which began to be implemented based on the Instruction of the Minister of Home Affairs Number 15 of 2021 concerning the Enforcement of Restrictions on Emergency Community Activities for Corona Virus Disease 2019 in the Java and Bali Regions. Until August 2021, several regions outside Java and Bali have implemented the PPKM [7].

In addition to limiting community activities, the government is also promoting Covid-19 vaccinations as an effort to suppress cases of Covid-19 transmission. Based on data from the Covid-19 Task Force, 25,744,850 people have been vaccinated up to the second vaccine throughout Indonesia. According to Our World in Data, this figure represents only 9.67% of the Indonesian population who have received the complete vaccine up to the 2nd dose [8].

The implementation of an effective Covid-19 vaccination is a global public health necessity in stemming the pandemic. Vaccines are one of the most reliable and cost-effective public health interventions ever implemented and can save millions of lives every year. Regarding the acceptance of the Covid-19 vaccine, the situation that needs to be well understood is that the public may have different levels of confidence in the COVID-19 vaccine due to limited information regarding the type of vaccine, when the vaccine will be available and its safety profile.

There are many factors that underlie the fact that there are still many people who have not carried out the covid-19 vaccination, there are people who still think that the vaccine is not necessarily effective in preventing COVID-19. Then there are still people who doubt the safety of the vaccine itself, then there are still those who think that COVID-19 is a conspiracy.

WHO Director-General Tedros Adhanom Ghebreyesus [9] said the world is not only fighting epidemics; we are fighting the infodemic. Fake news spreads faster and easier than this virus, and just as dangerous (WHO, 2020). He called the battle against "troll and conspiracy theories". According to Tedros [9], misinformation causes confusion and spreads fear thereby hampering the response to the outbreak, misinformation about the corona virus is perhaps the most contagious thing about it.

There are several things that affect the decline in immunization coverage rates in Indonesia, one of which is the spread of worrying information about vaccines whose credibility is unclear, causing controversy in the community. As a result, the implementation of the vaccination program is hampered from achieving the targets set by the government. In addition, there is information

circulating that the safety of the existing vaccine is doubtful because it contains ingredients that are not halal for Muslims. In a study conducted by the Wellcome Trust on the attitude of the global community towards vaccination, it was shown that several countries in the world still showed low public confidence in vaccines. The World Health Organization (WHO) also mentions that vaccine hesitancy is one of the top 10 threats to global health. The survey shows that 79% of the global population agree that vaccination is safe, 7% disagree that vaccination is safe and another 14% choose not to know. As for the belief in the benefits of vaccines, 84% of the global community agree that vaccines work well, 5% do not agree, and another 12% choose not to know [10]

In Indonesia, public confidence in the safety of vaccines shows a fairly high number, namely 83%, but there are about 6% of the people who do not agree, 7% are doubtful, and another 4% do not have an opinion. While regarding the benefits of vaccines, people in Indonesia show 70% agree on the effectiveness of the vaccine, 11% disagree, 13% are hesitant and 5% do not choose [10]

3. Methodology

3.1. Research Design

This research was conducted quantitatively and analyzed using descriptive analytic with a cross sectional approach. Sugiyono explains that descriptive research is research conducted to determine the value of independent variables, either one or more variables (independent) without making comparisons, or connecting with other variables [11]. For the quantitative approach, Arikunto explains that the approach uses quantitative because it uses numbers, starting from data collection, interpretation of the data, and the appearance of the results [12]. Clearly explain the objectives to be achieved, plan how to approach them, and collect various kinds of data as material for making reports.

3.2. Respondents

The research was conducted in South Kalimantan Province. The population of this research is people who live in South Kalimantan. The sampling technique used was accidental sampling with a total sample of 252 respondents. Accidental sampling is a sampling technique based on chance, anyone who coincidentally/incidentally meets a researcher can be used as a sample, if it is deemed that the person who happened to be met is suitable as a data source [11].

3.3. Research Instrument

The instrument used in this study was a questionnaire. Data collection is online using google form. Predictors of vaccine program acceptance were identified from vaccination status, views of vaccine effectiveness, vaccine safety, pandemic conspiracy, reliability of information about Covid-19, and willingness to pay for vaccines.

3.4. Statistical Analysis

Researchers collect data online with google form. After collecting the data, the information was then calculated, tabulated, classified, analyzed, and interpreted. The researcher analyzed the collected data using Fisher's Exact Test as a statistical test with 95% CI (α : 0.05). For statistical calculations required from the data, the researcher used SPSS 25 software.

4. Finding and Discussion

4.1. Finding

Table 1 shows the vaccination status of respondents.

Table 1. Vaccination Status

Vaccination Status	Number of Respondents	Percentage (%)
Not vaccinated yet	59	23.41
Complete (2 vaccinations)	124	49.21
Yes, but not complete (1 time vaccination)	69	27.38
Total	252	100.00

Based on the calculation results obtained, as many as 59 people (23.41%) have not been vaccinated; have completed the vaccine twice as many as 124 people (49.21%); completed but incomplete (1 time) as many as 69 people (27.38%).

Table 2 shows “safe of the Covid-19 vaccine”. A total of 52 people (20.63%) doubt that the Covid-19 vaccine is safe; as many as 2 people (0.79%) answered the Covid-19 vaccine was not safe; as many as 198 people.

Table 2. Covid-19 Vaccine is Safe

Safe Covid-19 Vaccine	Number of Respondents	Percentage (%)
Doubtful	52	20.63
No	2	0.79
Yes	198	78.57
Total	252	100.00

Table 3 shows “confidence that vaccines are effective in helping prevent Covid-19”. A total of 44 people (17.46%) doubt that the vaccine is effective in preventing Covid-19; as many as 21 people (8.33%) are not sure; as many as 187 people (74.21%) believe vaccines are effective in helping prevent Covid-19.

Table 3. Confidence that Vaccines are Effective in Helping Prevent Covid-19

Confidence that vaccines are effective in helping prevent Covid-19	Number of Respondents	Percentage (%)
Doubtful	44	17.46
Not sure	21	8.33
Certain	187	74.21
Total	252	100.00

Table 4 shows “worried that Covid-19 is a conspiracy”. A total of 52 people (20.63%) doubt that the pandemic is a conspiracy; as many as 168 people (66.67%) answered that the pandemic was not a conspiracy; 32 people (12.70%) responded that the pandemic was a conspiracy.

Table 4. Worrying that Covid-19 is a Conspiracy

Worried that Covid-19 is a Conspiracy	Number of Respondents	Percentage (%)
Doubtful	52	20.63
No	168	66.67
Yes	32	12.70
Total	252	100.00

Table 5. Not Trusting Information about Covid

Don't trust information about Covid	Number of Respondents	Percentage (%)
Doubtful	33	13.10
No	210	83.33
Yes	9	3.57
Total	252	100.00

Table 5 shows the “don’t trust information about Covid”. A total of 33 people (13.10%) were hesitant to believe information about Covid-19; as many as 210 people (83.33%) trust information about Covid-19; as many as 9 people (3.57%) do not trust information about Covid.

Table 6 shows “willing to pay for vaccination”. A total of 73 people (28.97%) hesitated to pay for vaccination; as many as 71 people (28.17%) were not willing to pay for vaccination; as many as 108 people (42.86%) were willing to pay for the vaccination.

Table 6. Willingness to pay for Vaccination

Willing to pay for Vaccination	Number of Respondents	Percentage (%)
Doubtful	73	28.97
No	71	28.17
Yes	108	42.86
Total	252	100.00

4.2. Discussion

Covid-19 vaccination is a government policy program around the world that aims to reduce the transmission of Covid-19, reduce morbidity, mortality due to Covid-19 and achieve group immunity in the community (herd immunity) and protect the community from Covid-19 disease in order to stay healthy, productive socially and economically. Herd immunity can only be formed if vaccination coverage is high and evenly distributed throughout the region. Prevention efforts through the provision of vaccination programs, if assessed from an economic point of view, will be much more cost-effective, when compared to treatment efforts [13].

The distribution of vaccines carried out by the government is marked by vaccinations carried out by President Joko Widodo Widodo on January 13, 2021. This is used as a way to make people believe that the vaccines given by the government are safe. However, each community has its own perception about the spread of the vaccine [14].

The lack of information obtained by the public is also a lot of hoaxes and confusing information is a strong factor in the lack of public trust in the vaccination program. The results of interviews conducted by researchers, all respondents received information about the COVID-19 vaccine through the mass media, so that the mass media became the only source of information for the public in obtaining facts about the COVID-19 vaccine. But in reality in Indonesia, the information disseminated is still not able to convey the facts and is still not evenly distributed. This clearly affects public confidence in the COVID-19 vaccine. In addition, in dealing with issues, both negative and positive issues that are spread in the mass media related to the COVID-19 vaccine, the government is still less active in responding to them.

Miss information spread through multiple channels could have a major impact on the acceptance of the Covid-19 vaccine. The acceleration of vaccine development has further increased public anxiety and could impair acceptance of the Covid-19 vaccine [15]. We cannot rely on public awareness in filtering information, because of the low literacy level of the Indonesian people, the Government must embrace the media in helping outreach efforts about the vaccine. The public still lacks information about the Covid-19 vaccine, coupled with hoax information circulating so that it seems to scare the public not to receive the Covid-19 vaccine. Providing clear, detailed and valid information is an important key in increasing public awareness about the Covid-19 vaccination program [16].

Based on the results of the analysis, there are still respondents who have not received the complete vaccine for both doses and who have only received one dose of vaccine. Based on the results of the study, there were reasons 15 respondents (25.4%) said they had not received a quota opportunity to participate in the covid-19 vaccination, then 11 respondents (18.7%) said they were still afraid of the side effects of the vaccine. covid-19 vaccination. And 11 respondents (18.7%) stated that they were still busy with their daily activities so they did not have time to vaccinate against COVID-19. Even so, 52 (88.1%) of the 59 respondents who did not vaccinate against COVID-19 stated that they had definite intentions to vaccinate against COVID-19.

The positive response of the public is dominated by statements that support and believe in the vaccination discourse issued by the government, such as believing that vaccination activities are important to break the chain of corona virus spread. In addition, the community also dominantly believes that the vaccine to be used is safe to use, proud of the government's performance and is also optimistic that the vaccine that will be given will be affordable by the whole community [17]. One study in Saudi Arabia revealed that out of 992 respondents, 642 indicated an interest in receiving a COVID-19 vaccine if it was available [18].

In Indonesia, public confidence in the safety of vaccines shows a fairly high number, namely 83%, but there are about 6% of the people who do not agree, 7% are doubtful, and another 4% do not have an opinion. Meanwhile, regarding the benefits of vaccines, people in Indonesia indicated that 70% agreed with the effectiveness of the vaccine, 11% did not agree, 13% were unsure and 5% did not vote.

According to World Meter (2020) vaccine indecision is a serious phenomenon in the world of global health, hesitancy on the acceptance of the COVID-19 vaccine can be a limiting step in global efforts to control the current pandemic of negative health and socio-economic effects [19]. WHO (2020) said the level of acceptance of vaccines can help in planning the necessary steps and steps to increase awareness and convince the public about the safety and benefits of vaccines, which will essentially help control the spread of the virus and reduce negative effects. The cost of the vaccine, effectiveness and duration of protection appear to be equally important factors for achieving this goal [19]. However, hesitancy about the acceptance of the COVID-19 vaccine could be a determining factor that hinders the success of controlling the COVID-19 pandemic. The current relatively high rate of vaccine acceptance in a region is associated with stronger trust in government and stronger confidence in vaccine safety and effectiveness [20].

Overall, from vaccination status, seen from vaccine effectiveness, vaccine safety, pandemic conspiracy, reliability of information about Covid-19, and respondents' willingness to pay for vaccines related to safety, the results show that the community positively accepts the implementation of Covid-19 vaccination.

5. Conclusion

Based on the results of vaccination status, views of vaccine effectiveness, vaccine safety, pandemic conspiracies, reliability of information about Covid-19, and respondents' willingness to pay for vaccines related to safety, the results show that the community positively accepts the implementation of the Covid-19 vaccination and it appears that the majority support the vaccination program in helping prevention of the spread of Covid-19.

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