

Original Research Paper

Community Perspective: Assessment of Knowledge, Attitudes and Information Exposure to Participation in the Covid-19 Vaccination Program

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Abstract: Vaccine's acceptance is affected by several factors such as their knowledge and perception of the possible spread of Covid-19, perception of vaccine safety, logistics, perception of vaccine efficacy and perceived risk, etc. A source of knowledge that has the potential to influence public acceptance or rejection of the Covid-19 vaccine, it is critical to disseminate clear and reliable information about vaccine safety and efficacy to gain public trust. This study aims to analyze the relationship between knowledge, attitudes and information exposure with community participation in the Covid-19 vaccination program. Quantitative research using analytical descriptive with cross-sectional approach. The research was carried out in the province of South Kalimantan. The sampling technique used accidental sampling with a total sample of 252 respondents. Data collection is done online using a questionnaire instrument via Google Form. Fisher exact test was used as statistical test with CI: 95% (α : 0.05). There is a relationship between knowledge and participation in the vaccination program (p-value: $0.023 < 0.05$). There is no relationship between attitude (p-value: $0.168 > 0.05$) and information exposure (p-value: $0.280 > 0.05$) with participation in the vaccination program. The availability of transparent information on vaccine efficiency and safety can play a key role for everyone to be encouraged to vaccinate without hesitation.

Keywords: Assessment of Attitudes, Assessment of Information Exposure, Assessment of Knowledge, Covid-19, Vaccination Program.



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].

2. Literature Review

Many efforts have been made to reduce 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 [4]

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 [5].

The Ministry of Health together with several organizations (ITAGI, UNICEF and WHO) conducted an online survey on 19-30 September 2020 to determine public acceptance of the COVID-19 vaccine. The survey involved more than 115,000 respondents from 34 provinces in Indonesia. Based on the survey, it was found that 658 respondents were willing to accept the COVID-19 vaccine if it was provided by the government, while 8% of them refused. The remaining 274 expressed doubts about the Government's plan to distribute the COVID-19 vaccine. Based on respondent data conducted by the Ministry of Health together with the Indonesian Technical Advisory Group on Immunization (ITAGI) released in October 2020, it shows that there are still around 7.6 percent of the population who refuse to be vaccinated, 26.6 percent of the people have not decided and are still confused [6].

Vaccine acceptance is influenced by several factors such as public knowledge and perceptions about the possible spread of Covid-19, perceptions of vaccine safety, logistics, perceptions of vaccine efficacy and risk perceptions, and others. A source of knowledge that has the potential to influence the public's acceptance or rejection of the Covid-19 vaccine, it is very important to disseminate clear and reliable information about the safety and efficacy of the vaccine to gain public trust. This study aims to analyze the relationship between knowledge, attitudes and information exposure with community participation in the Covid-19 vaccination program

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 [7]. 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 [8]. 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 [7].

3.3. Research Instrument

The instrument used in this study was a questionnaire. Data collection is online using google form.

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 show the relationship between knowledge and participation in the covid-19 vaccine.

Table 1. Relationship between Knowledge and Participation in the Covid-19 Vaccine

Knowledge	Vaccine		Total	p-value
	No	Yes		
Not enough	20	38	58	0.023
Well	39	155	194	

Based on the results of bivariate analysis using statistical tests, it was found that there were 20 respondents who had less knowledge and did not participate in the covid-19 vaccination and there were 38 respondents who had less knowledge but participated in the covid-19 vaccination. While the respondents who have good knowledge, there are 39 respondents who did not participate in the covid-19 vaccine and 155 respondents participated. The results of the statistical test showed that there was a relationship between knowledge and community participation in the covid-19 vaccination program (p-value = 0.023).

Table 2. Relationship of Attitude with Covid-19 Vaccine Participation

Attitude	Vaccine		Total	p-value
	No	Yes		
Not enough	26	66	92	0.168
Well	33	127	160	

Based on the Table 3, it was found that there were 26 respondents who had a low attitude of not participating in the covid-19 vaccination and there were 66 respondents who had less knowledge but still participated in the covid-19 vaccination. While the respondents who have a good attitude, there are 33 respondents who did not participate in the covid-19 vaccine and 127 respondents participated. The results of the statistical test showed that there was no relationship between attitudes and community participation in the covid-19 vaccination program (p-value = 0.168).

Table 3. Relationship between Information Exposure and Participation in the Covid-19 Vaccine

Information Exposure	Vaccine		Total	p-value
	No	Yes		
Not enough	35	99	134	0.280
Well	24	94	118	

Based on the results of the analysis, it was found that respondents who received less exposure to information about the covid vaccination 35 respondents did not participate in the covid-19 vaccination

and 99 respondents participated. Meanwhile, for respondents who received good information exposure, there were 24 respondents who did not participate in the COVID-19 vaccine and 94 respondents participated. Statistical test results show that there was no relationship between information exposure and community participation in the COVID-19 vaccination program (p -value=0.280).

4.2. Discussion

Knowledge is an individual's understanding of the topic presented. Knowledge is the ability to receive, store, and use information that is influenced by experience and skills [9]. Good information about the Covid-19 vaccination will also provide good knowledge to the public which then has an impact on good attitudes or behavior towards Covid-19 vaccination.

Based on the results of the analysis, it is known that knowledge is related to participation in the covid-19 vaccination. In line with Jessica and Rizma's research, there is a significant relationship between individual knowledge and individual actions related to COVID-19 ($p = 0.000 < 0.05$). Individuals with bad knowledge have a risk of doing bad actions by 6.674 times compared to individuals with good knowledge [10]. The results of this study are also in line with Muhammad (2021), who showed that the dominant variable in influencing public perceptions of vaccinating for COVID-19 was the knowledge variable. So that comprehensive and evenly distributed information to the whole community about the usefulness, safety of the covid-19 vaccine and all information about the covid-19 vaccine [11].

Based on the research of Kartika et al (2021), many respondents have high knowledge due to the large amount of information circulating about covid-19, both through social media, mass media, as well as posters and banners about covid-19 that are widely installed in various places. This high knowledge is also influenced by the respondent's high education factor. So that the public already knows the covid 19 vaccination, the target is from covid 19, the people who are allowed to get the covid 19 vaccination, and the benefits of the covid 19 vaccination, and the side effects caused by the covid 19 vaccination. In Kartika et al's research (2021), there are also some respondents who have low knowledge, this can be proven from the number of respondents who do not know what vaccination is, and what the benefits of vaccination are for, this is due to the lack of exposure of these respondents to information circulating about COVID -19, both through social media, mass media, as well as posters and banners about covid-19 that are widely installed in various places [12].

This is also related to the respondent's participation in the implementation of the covid-19 vaccination. According to Notoatmodjo, knowledge is a cognitive domain that is very influential in shaping one's actions. Acceptance of new behavior will be more lasting if it is based on knowledge. Attitude is the response or reaction of a person who is still closed to an object, stimulus, or topic. Attitude can also be interpreted as a person's tendency to act, either supporting or not supporting an object. Attitude has not become an action, but is a predisposing factor for a behavior. A complete attitude is formed by the components of cognition, affection, and conation [13]. This is in line with the research of Dewi et al (2020) which stated that there was no relationship between the attitudes of pregnant women in the third trimester and the prevention of COVID-19 (p -value $0.219 > 0.05$) [14]. Although many respondents have a good attitude about vaccination, there are still respondents who do not participate in the implementation of vaccination. This can be due to a lack of social support, or a lack of awareness from the respondents themselves to participate in the covid-19 vaccination [14].

One of the factors that causes people to be reluctant to vaccinate is the spread of hoaxes that vaccines are harmful to human health, vaccines contain pork oil, vaccines have tracking devices (chips), vaccines contain very high side effects, causing death. This kind of hoax affects people and makes them afraid to get vaccinated. The Indonesian government has also received a lot of criticism for its handling of Covid-19 and this continues until the Covid-19 vaccination stage. This is because the policy taken seems rushed without being accompanied by empirical evidence of the usefulness of vaccines. It is also impressed that there is an intention to seek economic benefits by forcing the use of this product by using the hands of power and the interests of the state [15]. According to Fatimah et al (2021) by holding socialization about the Covid-19 vaccine, this will provide an understanding to the public about the importance of vaccination. Thus, there is no longer any doubt within the individual in receiving the Covid-19 vaccine [16].

The importance of information about Covid-19 vaccination is the first step to convince health workers and the public that the vaccine is safe to use. Providing information is an activity that must be carried out in the face of Covid 19, especially in the process of giving vaccinations. Likewise,

information about Corona virus vaccination is useful as a source of knowledge for the community. Lack of knowledge and wrong attitudes can directly affect prevention practices against Covid 19 [17].

Based on the results of the analysis in this study, it was found that there was no relationship between information exposure and participation in the covid-19 vaccination. This is in line with Kundari's research (2020) which showed that the intensity and frequency of social media use did not show a significant relationship to COVID-19 prevention behavior (p -value > 0.05). The same results are shown in the respondents' assumptions or assessments of COVID-19 information from social media [18].

5. Conclusion

Based on the results of bivariate analysis, it is known that there is a relationship between knowledge and participation in the vaccination program (p -value: $0.023 < 0.05$). This can be an input for the government to be more aggressive in conducting health socialization regarding vaccines person to person or through social media. From the results of the study, it was also found that there was no relationship between attitude (p -value: $0.168 > 0.05$) and information exposure (p -value: $0.280 > 0.05$) with participation in the vaccination program.

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