

Factors Related to Covid-19 Vaccine Administration

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ABSTRACT

The spread of covid around the world is very fast and widespread. As of October 27, 2021, the number of covid patients in the world is 245,892,119 cases. The efforts made by the government in reducing the spread of the Covid 19 virus are through vaccination. The purpose of this study is to determine the factors related to the administration of the Covid-19 Vaccine at the Biddokkes Polyclinic of the Central Sulawesi Regional Police. This type of research is analytical research with quantitative methods with correlative techniques through a Cross sectional design approach. The population in this study was people who visited the Biddokkes Polyclinic of the Central Sulawesi Regional Police at the time of the study, with the number of samples being 96 people. The analysis used is univariate and bivariate analysis. There is no relationship between knowledge and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police with a p value of 0.153. There is a relationship between attitudes and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police with a p value of 0.040 and there is no relationship between the action and the administration of vaccines at the Biddokkes Polyclinic of the Central Sulawesi Regional Police with a p value of 0.667. It is hoped that health workers will maintain and can further improve good communication with the community in order to achieve smoothness and success in the vaccination program launched by the government and can realize herd Immunity in Indonesia.

Keywords: Knowledge; Attitude; Action; Covid-19 Vaccines

INTRODUCTION

Currently, the world is shocked by the pandemic caused by the Covid-19 virus. The disease was detected at the end of 2019 in December and was officially declared a pandemic on March 9, 2020. The corona virus is a new type found to cause Covid-19 (1). The spread of the Corona virus takes place contagiously, which means infections that spread widely quickly in a network, such as flu or disasters. This virus affects all groups ranging from children, adolescents, adults to the elderly. According to WHO, until now, the spread of covid around the world is very fast and widespread. As of October 27, 2021, the number of covid patients in the world is 245,892,119 cases, with the addition of new cases reaching 509,957 cases in a day and deaths of 4.97 million cases (1).

The efforts made by the government in reducing the spread of the Covid 19 virus are through vaccination. Vaccines are one of the most effective and economical ways to prevent

infectious diseases (2). So it is necessary to make the development of a vaccine to be more effective to weaken the coronavirus infection. So far more than 40 pharmaceutical companies and academic institutions around the world have launched their vaccine development programs against the COVID-19 virus (3).

The support for covid 19 vaccination activities until now is still reaping pros and cons, so there is a need for support by the community to carry out activities and maximize covid 19 vaccination in all circles of society. This support will help the implementation of the ongoing vaccination. This vaccination solution has again caused controversy for some people. First, because of the doubts about vaccine development, because the vaccine development time is quite short. This then raises public concerns about the side effects of the vaccine (4). So that people's attitudes become a benchmark for public awareness. Promotive and preventive efforts must be carried out by health workers and the public. The development of the internet and the convenience of up-to-date information provide support for the amount of information. The spread of misinformation will affect people's perception of the covid-19 vaccine and thus affect people's behavior (5).

In the midst of the world's struggle against Covid-19, there is a lot of misinformation circulating related to the Covid-19 vaccine. Misinformation and misinformation look trivial and without consequences. Misinformation can lead to confusion, anxiety, and even death. This situation has further triggered the emergence of mental health problems. The emergence of news that exposed Covid-19 as a high cause of death finally made people experience increased anxiety. Anxiety about death when felt excessively triggers the emergence of emotional states including neuroticism, depression, and psychosomatic disorders. Almost every country in the world struggles with false information and hoax news or what is referred to as "Infodemic". Covid-19 is spreading around the world very quickly. Meanwhile, scientific knowledge about it lags behind (6).

Based on preliminary studies conducted by researchers, it was found that some people have different knowledge about the policy of vaccination activities, there are still inaccurate statements regarding the safety of vaccines and a lot of information about side effects of vaccines. The attitude of people who do not want to be vaccinated because they are afraid of the side effects caused, doubt the effectiveness of the vaccine, and also doubt the halalness of the vaccine. Two in five people said they participated in vaccine activities of their own accord, the other two were vaccinated because they met travel requirements and one other person because they were required by the agency where they worked.

Based on this background, this study aims to determine the factors related to the administration of the Covid-19 Vaccine at the Biddokkes Polyclinic of the Central Sulawesi Regional Police.

METHOD

The type of research used is analytical research with quantitative methods through a Cross sectional design approach, which aims to analyze the relationship between knowledge, attitudes and actions of the community with the administration of the covid-19 vaccine at the Biddokkes Polyclinic of the Central Sulawesi Regional Police. The population in this study

was people who visited at the Biddokkes Polyclinic of the Central Sulawesi Regional Police. The sample used the size of the sample in this study was determined by the Lameshow formula so that 96 respondents were obtained with the sample technique used was Accidental sampling.

The independent variables in this study are knowledge, attitudes and actions while the dependent variables in this study are the administration of the covid-19 vaccine. Data analysis used the Chi square test with a p value of 0.05.

RESULTS

Characteristics of Respondents by age

Table 1. Distribution of respondents by age of respondents

Age	Frequency	Percentage (%)
< 20 Years	5	5.2
21- 35 Years	85	88.5
> 35 Years	6	6.3
Sum	96	100

Source: primary data, 2022

Characteristics of Respondents by Level of Education

Table 2. Distribution of Respondents According to Education Level in West Dolo District, Sigi Regency

Recent Education	Frequency	Percentage (%)
Middle School, High School	72	75.0
High Schooling	24	25.0
Sum	96	100

Source: primary data, 2022.

Characteristics of Respondents by Gender

Table 3. Distribution of Respondents By Gender

Gender	Frequency	Percentage (%)
Woman	55	57.3
Man	41	42.7
Sum	96	100

Source: primary data, 2022.

Analyzes Univariat Distribution of Respondents based on Vaccine Administration

Table 4. Distribution of Respondents based on Vaccine Administration

Vaccine Administration	Sum (n)	Percentage (%)
Complete	63	34,4
Incomplete	33	65,6
Sum	96	100

Source: primary data, 2022.

Knowledge

Table 5. Distribution of Respondents by Knowledge

Knowledge	Sum (n)	Percentage (%)
Not Good Enough	33	34.4
Good	63	65.6
Sum	96	100

Source: primary data, 2022.

Attitude

Table 6. Distribution of Respondents by Attitude

Attitude	Sum (n)	Percentage (%)
Not Good Enough	32	33.3
Good	64	66.7
Sum	96	100

Source: primary data, 2022.

Action

Table 7. Distribution of Respondents by Action

Action	Sum (n)	Percentage (%)
Not Good Enough	20	56
Good	16	44
Sum	36	100

Source: primary data, 2022.

Bivariate Analysis

The relationship of knowledge with vaccine administration

Table 8. The relationship between knowledge and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police

Knowledge	Total Vaccine Administration				P value
	Tidak Lengkap		Lengkap		
	f	%	f	%	
Not Good Enough	15	15,6	18	18,8	0,153
Good	18	18,8	45	46,9	
Total	33	34,4	63	65,6	

Source: primary data, 2022.

The relationship of attitudes with vaccine administration

Table 9. The relationship between attitudes and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police

Attitude	Total Vaccine Administration				P value
	Less Complete				
	f	%	f	%	
Not Good Enough	16	16,7	16	16,7	0.040
Good	17	18,8	47	49,0	
Total	33	34,4	63	65,6	

Source: primary data, 2022.

Relationship of Action with vaccine administration

Table 10. The relationship between action and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police

Action	Total Vaccine Administration				P value
	Incomplete				

		%	f	%	f	%	
Not Good Enough	14	14,6	31	32,3	45	46,9	
Good	19	19,8	32	33,3	51	53,1	0.040
Total	33	34,4	63	65,6	96	100	

Source: primary data, 2022.

DISCUSSION

The relationship between knowledge and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police

Based on Table 5, it can be seen that of the 96 respondents, most of the respondents have poor knowledge about vaccination, namely 33 respondents (34.4%) and those who have good knowledge as many as 63 respondents (65.6%).

Based on the results of researchers' observations, it can be seen that most respondents already have good knowledge about the vaccination program, which is characterized by the results of filling out the questionnaire shown at the time the study was carried out. Most of the respondents answered well based on the knowledge they had

The results of the Chi square statistical test obtained a value of $p = 0.153$ where $p > 0.05$ which means that there is no relationship between knowledge and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police. Researchers assume that knowledge has no meaningful relationship with administering vaccine action to a person. Because the community is fully familiar with the vaccination program carried out. A person with good or poor knowledge, will consciously vaccinate as the basis for the need to carry out community activities and is a demand that must be done by someone. According to researchers, knowledge is an idea that arises to obtain information and understand known things that can be remembered in the mind so that new ideas or information can be taken. Some of the factors that affect the level of knowledge are age, gender, location, level of education, income and possible risk of being infected with COVID-19.

This is in line with research conducted by Nugroho (2021) in research on the relationship of COVID-19 knowledge to the attitude of COVID-19 vaccine acceptance in students in Palembang states that there is no relationship between COVID-19 knowledge and COVID-19 vaccine acceptance in students from Palembang but contrary to other studies that show that another important factor that determines a person's attitude is knowledge (7).

This result is also in line with research conducted by Kevin, (2021) regarding the relationship between the level of knowledge to the attitudes and behaviors of the people of Medan Denai District regarding the Covid-19 vaccination obtained results that there is no relationship between knowledge and the implementation of vaccination (8).

The relationship between attitudes and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police

The results of the study based on it can be seen that out of 96 respondents, most respondents have a bad attitude regarding vaccination, namely 32 respondents (33.3%) and those who have a good attitude as many as 64 respondents (66.7%).

The results of the Chi square statistical test obtained a value of $p = 0.040$ where $p < 0.05$ which means that there is a relationship between attitudes and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police. The better a person's attitude will be, the better their understanding in carrying out vaccination activities. Because on the basis of a positive attitude, it will accept well and digest well every activity carried out. Vaccination does reap many pros as well as cons, but people with a good attitude can sort back what to do, so they are fully vaccinated. The cognitive component is a person's trust and knowledge of the object (COVID-19 vaccination). The more positive the trust in the COVID-19 vaccination and the more positive each trust, the more supportive the overall attitude will be. Public interest in participating in the COVID-19 vaccination has greatly increased due to a government policy that requires people to have vaccine certificates for various activities in public spaces.

Attitude is a still closed reaction or response of a person to a stimulus or object. Attitude is not yet an action or activity, but is a closed reaction, not an open reaction or open behavior. Attitude is the readiness to react to objects in a particular environment as a passion for objects (9). Based on the results above, it can be concluded that behavior is not only influenced by knowledge, but can be influenced by other predisposing factors, supporting factors, and driving factors.

The relationship between action and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police

The results of the study can be seen that out of 96 respondents, most respondents had poor actions regarding vaccination, namely 45 respondents (46.9%) and those who had good actions as many as 51 respondents (53.1%).

The high number of respondents who have good actions against the activities of the covid 19 vaccination program is caused because the respondents have a good response regarding the implementation of the covid 19 vaccination itself. Where the recommended program is implemented by the community immediately.

The results of the Chi square statistical test obtained a value of $p = 0.667$ where $p > 0.05$ which means that there is no relationship between action and vaccine administration at the Biddokkes Polyclinic of the Central Sulawesi Regional Police. The absence of a significant relationship between the action and also the completeness of a person's vaccine status is caused because someone who has a good or less response to a program will continue to carry out vaccination activities. People with low ability to act will also feel that they still have to carry out vaccine activities considering the importance of vaccines for someone in strengthening the body and also facilitating social life. As for some of the reasons respondents who are not interested in participating in the COVID-19 vaccination, namely

being afraid of needles, feeling that complying with health protocols alone is enough to avoid exposure to the coronavirus, because they feel that they are old and have diseases in their bodies, and the reason that is most widely raised is fear of the side effects caused by the vaccine. Meanwhile, in respondents who are interested in participating in the COVID-19 vaccination, their reason is because they follow the recommendations of the government for COVID19 vaccination, job demands, in addition to reducing the risk of exposure to the coronavirus.

CONCLUSION

This study concluded that there is no relationship between knowledge and the administration of the Covid-19 Vaccine at the Biddokkes Polyclinic of the Central Sulawesi Regional Police, there is a relationship between attitudes and the administration of the Covid-19 Vaccine at the Biddokkes Polyclinic of the Central Sulawesi Regional Police and there is no relationship between the action and the administration of the Covid-19 Vaccine at the Biddokkes Polyclinic of the Central Sulawesi Regional Police.

SUGGESTION

It is hoped that the institution of the Biddokkes Polyclinic of the Central Sulawesi Regional Police can maintain and improve services and socialization to the community so that the implementation of covid 19 vaccination activities can be better and faster to achieve herd immunity.

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