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Science Midwifery

journal homepage: www.midwifery.iocspublisher.org

Factors Related to the Implementation of the Covid-19 Vaccine in the Indonesian Army in District-City, Riau Province

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ARTICLE INFO

Article history:

Received Sept 15, 2022

Revised Sept 22, 2022

Accepted Oct 13, 2022

Keywords:

Covid-19
Implementation
Indonesian Army
Vaccine

ABSTRACT

The Indonesian Armed Forces synergizes with the government to accelerate the implementation of the COVID-19 vaccination. Objectives, knowing the factors related to the achievement of the implementation of the COVID-19 vaccine invasion of the Indonesian Army. Method, using a quantitative method with a cross-sectional study approach. The sampling method was accidental sampling. The number of respondents was 96 community respondents and 16 respondents from the vaccination team. Data was collected using questionnaires and observations. Data were analyzed using Chi Square test statistical software. Result, there is a relationship between knowledge and public perception < 0.05 , the value of $= 0.009$, not good with the achievement of vaccine 1 (20%), vaccine 2 (14.5%), vaccine 3 (65.5%). The unrelated factors are the knowledge and skills of the vaccination implementation team > 0.05 , the value of $= 0.006$, the type of vaccine available > 0.05 , the value of $= 0.585$, the COVID-19 vaccine distribution system > 0.05 , the value of $= 0.359$ and facilities and infrastructure > 0.05 the value of $= 0.854$. The relationship between incentive motivation of the vaccination team and the achievement of vaccine implementation was not good (43.8%) and good (56.3%). Vaccination achievements in the four Military District with good category 70.8%, quite good 17.7% and not good 11.5%. Conclusion, the related factors are knowledge and public perception about the COVID-19 vaccine with the achievement of the implementation of the incursion COVID-19 vaccine. The Army while unrelated factors include the knowledge and skills of the vaccination team, the types of vaccines available, the COVID-19 vaccine distribution system and facilities and infrastructure.

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INTRODUCTION

The COVID-19 pandemic has occurred two years since it was established by WHO on March 11, 2020. In the global situation, data as of May 23, 2021, there were 166,346,635 confirmed cases of COVID 19 and 3,449,117 deaths due to COVID-19 (Kaligis et al., 2020),(Abdullah, 2020). Meanwhile, in Indonesia alone, as of May 23, 2021, there were 1,769,940 confirmed cases and 49,205

deaths (CFR 2.8%) (Aisyah et al., 2020),(Sari et al., 2021). The government has made various intervention efforts to tackle the COVID-19 pandemic. Intervention efforts are carried out not only through the application of health protocols but also other interventions, namely vaccination (Djaafara et al., 2021),(Djaafara et al., 2021).

Vaccines are one of the most effective and economical ways to prevent infectious diseases. So it is necessary to develop a vaccine to be more effective at weakening the corona virus 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. (Hodgson et al., 2021),(Harapan et al., 2020). However, the issue of vaccination in Indonesia has a number of challenges. The Research and Development Agency stated that the challenges of implementing COVID-19 vaccination in Indonesia are unclear information (29.4%), Do not believe in Covid 19 (26.3%), Vaccine distribution is not evenly distributed (17.3%), limited health facilities (11.2%) , limited health workers (7.5%), Don't know / don't answer (8.3%). Public perception of receiving COVID-19 vaccination in each province is different (Faturrohman et al., 2021),(Faturrohman et al., 2021)(Ayuningtyas et al., 2020).

During September 2020, WHO, the Indonesian Ministry of Health, ITAGI and UNICEF conducted an online survey of more than 115,000 respondents in 34 provinces in Indonesia to measure public acceptance of the COVID-19 vaccine (Sulistiyawati et al., 2021),(Sutomo et al., 2021). The survey shows that more than 70% of the public are aware of the government's discourse to carry out national vaccinations in an effort to reduce the rate of COVID-19 cases (Sutomo et al., 2021). The majority of the community (around 65%) are willing to accept the COVID-19 vaccine if it is provided by the government, while around 27% feel doubtful and a small proportion (8%) refuse. Aceh and West Sumatra are the provinces with the lowest revenues (below 50%). Meanwhile, the regions with the highest revenues were West Papua with 74% and the Nusa Tenggara Islands with 70% (Widiawaty et al., 2022)(Wibowo et al., 2022)(Mahendradhata et al., 2021).

In order to achieve the success of the national vaccination, the support of all parties, including the Indonesian Army, is needed. Riau Province is one of the provinces with a high vaccination success rate. In accordance with the population of Riau Province of approximately 6 (six million) people, the target set by the unit is based on the total allocation of vaccine stocks sent per province for the Indonesian army's invasion vaccine, which is 30% of the total vaccines sent(Wibowo et al., 2022) (Mahendradhata et al., 2021).

Delivery of COVID-19 vaccines from the Ministry of Health with percentage details as follows: Provincial and Regency-City Health Offices 40%, Indonesian Army 30% and Police 30% Based on the results of a preliminary study in the form of interviews conducted by researchers in March 2022 on 4 Vaccine team personnel and 20 people as vaccine targets from each Military District, in this case represented by 4 Military Districts due to time constraints, namely Military District 0301 Pekanbaru City, Military District 0313 Kampar Regency, Military District 0321 Dumai City, Military District 0322 Siak Regency, the results of data information that affect include: Knowledge and public perception of vaccines there are 12 people (36.4%),The knowledge and skills of the vaccination implementation team are 8 people (24.2%), the types of vaccines available are 6 people (18.2%), the distribution system of the Indonesian Army's invasion vaccine is 4 people (12.1%) and the implementation facilities and infrastructure There were 3 people vaccinated (9.07%).

Meanwhile, based on preliminary study data in the form of observations that the researchers conducted in March 2022 on the vaccine target communities and the vaccine team, the following results were obtained: the public did not know the function of vaccines that could break the chain of transmission of COVID-19, form mutual immunity, vaccines are weakened viruses. Vaccines that contain viral DNA that respond to other viruses that enter the body, if they attack so that they can form body antibodies, people have a perception about vaccines containing substances

that are harmful to the body in the future, only a small part of the community knows that vaccines must be given 2 times to achieve this. optimal effect, people carry out vaccinations not on their own consciousness but because of the obligation to carry out activities related to government regulations.

Public perception about vaccines is that vaccination is important because it is required by the government, vaccines are not safe and vaccines are not halal. Data related to the knowledge and skills of the vaccination team, namely the lack of knowledge of the vaccination team about the purpose of giving vaccines, side effects of vaccines, vaccine safety and skills in providing services that have not been optimally trained. In the event that the types of vaccines available are still incomplete for each stage of administration and for each age level, as well as the vaccine logistics distribution system and consumable medical materials (BMHP) vaccines from the center are not sufficient, as a result, people still create queues and the types of vaccine platforms available incomplete.

For the results of observations in the field of facilities and infrastructure in the implementation of vaccination, namely where the temperature of the room where the vaccination is carried out is hot and narrow, the lack of human resources for the vaccination team, limited sphygmomanometer equipment and internet network that is not good and there are vaccination incentive factors that have not been running properly received by the vaccination team. . Based on the results of the preliminary study, the purpose of this research is to find out the Factors Associated with the Achievement of the Implementation of the COVID-19 Vaccine in the Indonesian Army in the Districts of Riau Province.

METHOD

This type of research is descriptive quantitative, with the aim of knowing the factors related to the achievement of the implementation of the COVID-19 vaccine against the Indonesian Army's invasion of the Army in District-City in Riau Province. This research uses a cross-sectional study approach. The location where the study was carried out was at the place where the vaccination was carried out by each Military District in the ranks of Korem 031 Wira Bima, Riau Province in June 2022. In this study, all people who had received vaccinations and the vaccination team were involved. Samples were selected based on inclusion and exclusion criteria sequentially until the minimum sample size was met, namely 96 people. Data processing is carried out with the stages of Editing, Coding, Entry, Cleaning Data, and Saving. The analysis carried out is univariate analysis.

RESULT AND DISCUSSION

Research on factors related to the achievement of the implementation of the INDONESIAN ARMY invasion of COVID-19 vaccine has been conducted on 96 community respondents and the vaccination team in District-City in Riau Province on August 1-6, 2022, the following results were obtained:

Univariate Analysis

COVID-19 Vaccination Places

The frequency distribution by COVID-19 vaccination site is described in table 1 below:

Table 1. Frequency Distribution Based on the Implementation of COVID-19 Vaccination (N=96)

No.	Characteristics	Frequency (N)	Percentage (%)
1.	1 Pekanbaru	24	25
2.	2 Kampar	24	25
3.	3 Dumai	24	25
4.	4 Siak	24	25
Total		96	100

Table 1 above shows that of the 96 respondents studied in 4 Military District. The data shows that the number of respondents at the research site is equivalent in number to each Military District, namely as many as 24 respondents (25%).

Observation of the Target Community for COVID-19 Vaccination

Observations on target communities for COVID-19 vaccination are described in table 2 below.

Table 2. Results of Observations on the Target Community for Covid-19 Vaccination (N=96)

No.	Characteristics	Frequency (N)	Percentage (%)
1.	Community Knowledge and Perception		
	- Well		
	- Not good	41	42.7
	Total	55	57.3
		96	100
2.	Vaccination Team Knowledge and Skills		
	- Well		
	- Not good	81	84.4
	Total	15	15.6
		96	100
3	Types of Vaccination Available		
	- Well	49	51
	- Not good	47	49
	Total	96	100
4	Covid-19 Vaccine Distribution System		
	- Well		
	- Not good	49	51
	Total	47	49
		96	100
5	Facilities and Infrastructure for the Implementation of Covid-19 Vaccination		
	- Well	57	59.4
	- Not good	39	40.6
	Total	96	100
6	Achievements in the Implementation of Covid-19 Vaccination		
	- Well	68	70.8
	- Pretty good	17	17.7
	- Not good	11	11.5
	Total	96	100

The table above shows the 96 respondents studied in 4 Military Districts. The data shows that the level of knowledge and perception of the target community for the COVID-19 vaccine is mostly in the poor category, namely 55 respondents (57.3%), while the other variables show a good category, namely the level of knowledge and skills of the COVID-19 vaccination implementation team as many as 81 respondents (84.4%), the types of vaccines available were 49 respondents (51%), the COVID-19 vaccine distribution system was 49 respondents (51%), the facilities and infrastructure for the implementation of the COVID-19 vaccination were 57 respondents (59.4%) and the achievements implementation of the COVID-19 vaccine as many as 68 respondents (70.8%).

Observations on the COVID-19 Vaccination Implementing Team

Frequency distribution based on the results of questionnaire data and observations on the COVID-19 vaccination implementation team is described in table 3 below.

Table 3. Frequency Distribution of Questionnaire and Observation Data on the Covid-19 Vaccination Implementing Team according to the Vaccination Implementing Team (N=16)

No.	Characteristics	Frequency (N)	Percentage (%)
1	Vaccination Team Knowledge and Skills		
	- Well		
	- Not good	12	75

Total	4	25
	16	100
2 Types of Vaccination Available		
- Well	5	31.3
- Not good	11	68.8
Total	16	100
3 Covid-19 Vaccine Distribution System		
- Well	10	62.5
- Not good	6	37.5
Total	16	100
4 Facilities and Infrastructure for the Implementation of Covid-19 Vaccination		
- Well	9	56.3
- Not good	7	43.8
Total	16	100
5 Incentive Motivations for the Covid 19 Vaccination Implementing Team		
- Well	9	56.3
- Not good	7	43.8
Total	16	100

Table 3 above shows the 16 respondents studied in 4 Military Districts. The data shows that the variable types of vaccinations available are in a poor category, namely 11 respondents (68.8%) while the other variable data shows a good category, namely the knowledge and skills of the vaccination implementation team according to the vaccination implementation team as many as 12 respondents (75%), the vaccine distribution system according to the vaccination implementation team as many as 10 respondents (62.5%), according to the vaccination implementation team 9 respondents (56.3%) and 9 respondents (56.3%).

Bivariate Analysis

Bivariate analysis was used to see the relationship between the independent variable and the dependent variable. Based on statistical data analysis using a computer program, namely SPSS from 96 community respondents in the City-Regency of Riau Province who carried out vaccinations in Military District, the following results were obtained:

Table 4. The Relationship between Variable Characteristics and Achievement in the Implementation of the Covid-19 Vaccine

Characteristics	Vaccination Achievements			P value
	Vaccine 1 (not good) (%)	Vaccine 2 (pretty good) (%)	Vaccine 3 (good) (%)	
Knowledge and Perception				
Not good	11 (20)	8 (14.5)	36 (65.5)	0.009
Well	0 (0)	9 (22)	32 (78)	
Implementing Team Knowledge and Skills				
- Not good	1 (6.7)	3 (5.6)	14 (93.3)	0.06
- Well	27 (33.3)	16 (34.3)	54 (66.7)	
Types of Vaccination Available				
- Not good	7 (14.9)	8 (17)	32 (68.1)	0.585
- Well	4 (8.2)	9 (18.4)	36 (73.5)	
Vaccine Distribution System				
- Not good	5 (10.6)	11 (23.4)	31 (66)	0.359
- Well	6 (12.2)	6 (12.2)	37 (75.5)	
Facilities and Infrastructure for the Implementation of Covid-19 Vaccination				
Not good	5 (12.8)	6 (15.4)	28 (71.8)	0.854
Well	6 (10.5)	11 (19.3)	40 (70.2)	

Well

Table 4 above shows that from the 96 respondents studied, it is known that there is a relationship between knowledge and public perception < 0.05 , the value of $r = 0.009$, not good with vaccine 1 (20%), vaccine 2 (14.5%), vaccine 3 (65.5%). The unrelated factors are the knowledge and skills of the vaccination implementation team > 0.05 , the value of $r = 0.006$, the type of vaccine available > 0.05 , the value of $r = 0.585$, the COVID-19 vaccine distribution system > 0.05 , the value of $r = 0.359$ and facilities and infrastructure > 0.05 the value of $r = 0.854$.

Discussion

Factors related to the achievement of vaccination implementation are knowledge and public perception of the COVID-19 vaccine. Factors that are not related to the achievement of vaccination implementation include the knowledge and skills of the vaccination implementation team, the types of vaccinations available, the vaccine distribution system and the facilities and infrastructure for the implementation of vaccination. The relationship between the motivation of the vaccination team and the achievement of the vaccine implementation was in the poor category (43.8%) and good category (56.3%). The achievement of the implementation of vaccination in the four Military Districts with a good category of 70.8%, a good category 17.7% and a poor category 11.5%. The highest level of knowledge and perception is in the unfavorable category as many as 55 respondents (57.3%). Knowledge and perception factors about the COVID-19 vaccine from the community affect the willingness and awareness of the community in carrying out vaccinations. The results of the data show that the level of knowledge and skills of the COVID-19 vaccination implementation team, according to the community, is mostly in the good category, namely 81 respondents (84.4%). Vaccination team services in the implementation of vaccines require communication and education related to the benefits and functions of vaccination as well as team skills in injecting because it can reduce fear and pain when vaccinating and increase public confidence in the benefits of vaccines. Indirectly, the information and education contained in the attractively made brochures/leaflets has an influence on the community because the brochures/leaflets are practical, effective and economical in inviting and encouraging COVID-19 vaccinations. A good increase in knowledge from the vaccination team is needed in order to be able to provide an example to the community so that the achievement of vaccination implementation becomes more optimal. The role of the vaccination implementation team as health workers is expected to always remind the public to get the right knowledge and information about vaccines and provide good education so that the public's view of the team is also of good value [19][20]. The implementation of the COVID-19 vaccination runs according to the standard of vaccine service. The vaccinations available in each Military District where the implementation is carried out according to the community are complete, both primary and booster vaccinations and are in accordance with the needs of the community for children, adolescents (Pfizer), adults (Astra Zeneca, Moderna and Sinovac) and the elderly (Janssen) both according to the stage or level of vaccine administration as well as according to the available vaccine platform or trademark, while from the point of view of the vaccination implementation team, the types of vaccinations available are incomplete at certain times because it depends on the stock of vaccines distributed to the Military District where it is implemented. The distribution and quality of vaccine distribution are in accordance with the regulations and technical standards of vaccine distribution set by the government.

CONCLUSION

The related factors are the knowledge and public perception about the COVID-19 vaccine with the implementation of the Indonesian Army Covid-19 vaccine, while the unrelated factors include the knowledge and skills of the vaccination implementation team, the types of vaccines available, the COVID-19 vaccine distribution system and the facilities and equipment. Government agencies

involved in accelerating the implementation of COVID-19 vaccination must actively disseminate, provide education and information in the form of distributing leaflets or brochures about COVID-19 vaccine knowledge and proactively provide clear educational information about COVID-19 vaccination.

ACKNOWLEDGEMENT

Authors would like to express our gratitude to the academic community of the Faculty of Medicine at the University of Mataram, who have assisted and supported in the process of compiling this literature review.

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