FACTORS THAT INFLUENCE PREGNANT WOMEN'S INTEREST ON COVID-19 VACCINATION FOR PREGNANT WOMEN

Desti Nataria[1], Suci Rahmadheny[2]

[1-2]Faculty Of Midwifery, Prima Nusantara Bukittinggi Health Institute, Bukittinggi, Indonesia

A B S T R A C T

Indonesia has made the implementation of the COVID-19 vaccination as part of its strategy for dealing with the COVID-19 pandemic. COVID-19 vaccination is also given to pregnant and lactating women because pregnant women are infected with COVID-19 Severe cases are also at risk of experiencing preterm labor, miscarriage, and even death. The purpose of this study was to find out the factors that influence pregnant women to vaccinate against COVID-19 for pregnant women in the Sungai Penuh Health Center work area in 2021. This type of research is cross-sectional. The sample taken was 31 pregnant women using total sampling. Collecting data using a questionnaire then analyzed using chi square. Time of research in January-September. Statistical test results obtained p value = 0.002 (<0.05) there is a relationship between the variable knowledge of pregnant women and COVID-19 vaccination. The statistical test results obtained p value = 0.704 (> 0.05) there was no relationship between the variable education level of pregnant women and COVID-19 vaccination. Statistical test results obtained p value = 0.007 (< 0.05). there is a relationship between the variable anxiety of pregnant women and the COVID-19 vaccination. The statistical test results obtained p value = 0.001 (<0.05) there is a relationship between the role of health workers and the COVID-19 vaccination. It is hoped that pregnant women will want to vaccinate against COVID-19.

I. INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARSCoV-2). SARS-CoV-2 is a new type of corona virus that has never been identified in humans before. There are at least two types of corona viruses that are known to cause diseases that can cause severe symptoms such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The government has designated this non-natural disaster as a national disaster. (KEMENKES RI 2020)

The government has made various intervention efforts to tackle the COVID-19 Pandemic. Intervention efforts are carried out not only through implementing health protocols but also other interventions, namely vaccination (Arina, 2020). Indonesia has made the implementation of the COVID-19 vaccination a part of its pandemic response strategy. COVID-19, where the implementation of the COVID-19 vaccination aims to protect the public from infection with SARS-CoV-2 which can cause morbidity and death from COVID-19. Vaccination against COVID-19 is an effort made to actively elicit/increase a person's immunity to a disease, so that if one day you are exposed to the penile disease, you will not get sick or only experience mild illness. Giving COVID-19 Vaccination is also given to pregnant and lactating women (Irmawati et al., 2021).

COVID-19 vaccination is also given to pregnant and lactating women, where we know pregnant women have a low immune system, so they are more susceptible to disease or infection. Corona virus in pregnant women will cause a number of existing diseases to cause severe symptoms, even leading to loss of life. In addition, pregnant women who are severely affected by COVID-19 are also at risk of experiencing preterm labor, miscarriage, and even death (Irmawati et al., 2021). In recent times, it has been reported that a number of pregnant women who were confirmed positive for COVID-19 experienced severe symptoms and even died. To protect pregnant women and their babies from COVID-19 infection, the Ministry of Health provides the COVID-19 vaccine to pregnant and lactating women. (KEMENKES RI, 2021).

Providing COVID-19 vaccination to groups of pregnant and lactating women has caused a lot of wrong perceptions among community groups, especially pregnant and lactating women who are a group at high risk of transmission of COVID-19. (Wilianarti, Pipit Festi; Wulandari, 2021). Much research has been done on giving COVID-19 vaccinations. Research focuses on developing an effective vaccine against COVID-19. Vaccination against COVID-19 has raised doubts in the community, there are many variations of vaccines in various countries, and vaccines are also associated with a conspiratorial world. (Nugroho et al., 2021)

Vaccine hesitancy and misinformation are major obstacles to achieving vaccine coverage. Study of acceptance of the COVID-19 vaccine in 13,426 randomly selected people in 19 countries, mostly with high incidence of COVID-19. From the study it was found that, 71.5% are willing to be vaccinated if it is proven safe and effective, and 48.1% will be vaccinated if the government recommends it. A person's willingness to be vaccinated is a concern. Countries with revenues of more than 80% tend to be Asian countries with a strong belief in government recommendations, such as China, South Korea and Singapore. A relatively high trend is also found in middle-income countries such as Brazil, India and South Africa. (Généreux et al., 2021)

Governments, public health teams and advocacy groups must be prepared to overcome doubts and build vaccine literacy so that people will receive immunizations at the right time. Anti-vaccination activists have campaigned in many countries against the need for a vaccine, with some

denying the existence of COVID-19 at all. The spread of misinformation through multiple channels can have a major impact on acceptance of a COVID-19 vaccine. The accelerated development of vaccines is increasing public anxiety and may undermine public acceptance. Governments and the public should measure the current level of willingness to accept potentially safe and effective COVID-19 vaccines and identify correlations of vaccine hesitancy and/or acceptance. (Fadda et al., 2020)

II. METHODS

This research approach used in this study is a quantitative approach with cross-sectional survey design. The population in this study were 31 pregnant women at Sungai Penuh Health Center. Sample of this study were taken using total sampling technique. 31 pregnant women become sample of this stufy. The instrument which used in this study was a questionnaire. Bivariate analysis was carried out to determine the relationship between each independent variable and the incidence of stunting using the Chi-square formula for significance level $p = 0.05$

III.   RESULT

Table 1. Distribution of COVID-19 Vaccination in Pregnant Women

No	vaccination	Frequency	
		n	%
1	Doesn't get vaccination	21	67.7
2	Get vaccination	10	32.3
Total		31	100

Based on table 1, it was found that as many as 21 (67.7%) pregnant women had not received the COVID-19 vaccination.

Table 2. Distribution of Knowledge of pregnant women related to COVID-19 Vaccination

No	knowledge	Frequency	
		n	%
1	Low	19	61.3
2	good	12	38.7
Total		31	100

 Based on table 2, it was found that knowledge of pregnant women is known that as many as 19 (61.3%) pregnant women have low knowledge about COVID-19 Vaccination.

Table 3. Distribution of Education Levels of Pregnant Women

No	Education	Frequency	
		n	%
1	Low	3	9.7
2	High	28	90.3
Total		31	100

Based on table 3, the level of education in the working area of Sungai Penuh Health Center, it was found that 3 (9.7%) pregnant women had a low education level, namely junior high school and 28 (90.3%) pregnant women had a high education level.

Table 4. Frequency Distribution of the Anxiety Level of Pregnant Women

No	Kecemasan	Frequency	
		N	%
1	High	10	32.2
2	Low	10	32.2
3	Average	11	35.5
Total		31	100

Based on table 4, level of anxiety in pregnant women, it is known that as many as 10 (32.2%) pregnant women with moderate anxiety and 11 (35.5%) pregnant women with moderate anxiety.

Table 5. Frequency Distribution of the Role of Health Care

No	Role of Health Care	Frequency	
		n	%
1	Not good	17	54.8
2	Good	14	45.2
Total		31	100

Based on table 5, it was found that role of health workers in pregnant women, it was found that as many as 17 (54.8%) pregnant women said that the role of health workers was not good.

Table 6. Relationship between Knowledge and Vaccination of COVID-19 in Pregnant Women

Knowledge	Vaccination of COVID-19 in Pregnant Women				OR 95% CI	Nilai P
	Doesn't get vaccination		Got vaccination			
	N	%	n	%		
Low	17	54.8	2	6.5	17.000(2.558-112.981)	0.002
High	4	12.9	8	25.8		
Total	21	67.7	10	32.3		

Based on table 6, it was found p value = 0.002 (<0.05) thus Ho was rejected and Ha was accepted. It can be concluded that there is a relationship between the variable knowledge of pregnant women and COVID-19 vaccination. The Odd Ratio (OR) value = 17,000(2,558-112,981), meaning that pregnant women with high knowledge have a 17,000 times greater chance of vaccinating against COVID-19 than pregnant women with low knowledge.

Table 7. Relationship between Education Level and COVID-19 Vaccination in Pregnant Women

Education level	Vaccination of COVID-19 in Pregnant Women				OR 95% CI	Nilai P
	Doesn't get vaccination		Got vaccination			
	N	%	n	%		
Low	2	6.5	1	3.2	0.947(0.76-11.870)	0.704
High	19	61.3	9	29.0		
Total	21	67.8	10	32.2		

Based on table 7, The results of the statistical test obtained p value = 0.704 (> 0.05) thus Ho was accepted and Ha was rejected. It can be concluded that there is no relationship between the variable education level of pregnant women and COVID-19 vaccination. The Odd Ratio (OR) value = 0.947(0.76-11.870).

Table 8. Relationship between Anxiety level and COVID-19 Vaccination in Pregnant Women

Anxiety level on pregnant women	Vaccination of COVID-19 in Pregnant Women				Nilai P
	Doesn't get vaccination		Got vaccination		
	N	%	n	%	
High	3	9.7	7	22.6	
Low	8	25.8	2	6.5	0.007
moderate	10	32.2	1	3.2	
Total	21	67.7	10	32.2	

Based on table 8, as many as 10 (32.2%) pregnant women who have not had the COVID-19 vaccination have moderate anxiety. As many as 7 (22.6%) pregnant women who had received the COVID-19 vaccination had normal anxiety, 2 (6.5%) pregnant women who had had the COVID-19 vaccination had moderate anxiety, and as many as 1 (3.2%) pregnant women who had the vaccination COVID-19 has moderate anxiety. The statistical test results obtained p value = 0.007 (<0.05) thus Ha was accepted H0 was rejected. It can be concluded that there is a relationship between the variable anxiety of pregnant women and COVID-19 vaccination in pregnant women.

Table 9. Relationship between Role of Health Care and COVID-19 Vaccination in Pregnant Women

Role of Health Care	Vaccination of COVID-19 in Pregnant Women				OR 95% CI	Nilai P
	Doesn't get vaccination		Got vaccination			
	n	%	N	%		
Tidak Baik	16	51.6	1	3.2	28.800(2.8	
Baik	5	16.1	9	29.0	96-	0.001
Total	21	67.7	10	32.3	286.425)	

Based on table 9, The results of the statistical test obtained p value = 0.001 (<0.05) thus Ha was accepted and H0 was rejected. It can be concluded that there is a relationship between the variable role of health workers and COVID-19 vaccination in pregnant women. The Odd Ratio (OR) = 28,800 (2,896-286,425) means that pregnant women with a good health worker role have the opportunity to vaccinate against COVID-19 by 18,800 times greater than pregnant women with a bad health worker role.

IV. DISCUSSION

Based on the results of the study, it was found that 17 (54.8%) pregnant women who had not had the COVID-19 vaccination had low knowledge about the COVID-19 vaccination, and as many as 4 (12.9%) pregnant women who had not had the COVID-19 vaccination had high

knowledge about COVID-19 vaccination. As many as 2 (6.5%) pregnant women who did the COVID-19 vaccination had low knowledge about the COVID-19 vaccination, and as many as 8 (25.8%) pregnant women who did the COVID-19 vaccination had high knowledge about the COVID-19 vaccination . Statistical test results obtained p value = 0.002 (<0.05) so there is a relationship between the knowledge variable of pregnant women and COVID-19 vaccination with an Odd Ratio (OR) = 17,000 (2,558-112,981), meaning that pregnant women with high knowledge have a chance vaccinating against COVID-19 is 17,000 times greater than pregnant women with low knowledge.

The results of this study are in line with the results of research conducted by Nirwan, et al (2021) which show that based on the results of statistical tests using the Fisher's Exact Test, the value $\rho = 0.001 < \alpha = 0.05$ means that Ha is accepted and H0 is rejected, meaning there is a relationship between the level of public anxiety. in Puncak Indah Village, Malili District, East Luwu Regency with the Corona virus Disease 2019 vaccination (Nirwan et al., 2021). In line with the results of research conducted by Debby Yolanda, et al (2021), it is known that knowledge is a very important dominant in shaping one's actions with a p value = 0.011 (Yolanda et al., 2021). This is also in line with research conducted by Reza Dara Pertiwi and Dian Ayubi (2021) showing that the relationship between knowledge and vaccination status shows a significant relationship (p Value = 0.001) with OR=7.062, meaning that pregnant women who have low knowledge have a risk of not vaccination of 7.062 times compared to pregnant women who have high knowledge, after controlling for income variables. The knowledge model with household income variables can explain the vaccination status variable by 34% (Reza Dara Pertiwi, 2021).

According to the researcher's assumption, knowledge is one of the basics for someone to take action where someone will vaccinate against COVID-19 or not. This COVID-19 vaccination is something new and something that many people, especially pregnant women, have not yet applied. So the knowledge of the community and pregnant women needs to be given quickly and easily understood. Outreach to the public and pregnant women needs to be carried out simultaneously and with correct information and based on facts so as not to generate negative perceptions and thoughts and to break up false information that is widely circulating. Lack of knowledge about an object results in a lack of understanding of the object, so if someone does not know about the COVID-19 vaccine, it will result in a lack of understanding in the utilization of the COVID-19 vaccination. Lack of knowledge will have an adverse impact on health care, thereby reducing a person's health status and the unwillingness of pregnant women to vaccinate against COVID-19. Vaccinating COVID-19 for pregnant women will prevent the possibility of

transmission of the virus, besides that even if infected it does not have a harmful impact on the mother and fetus.

Based on the results of the study, it was found that 2 (6.5%) pregnant women who had not had the COVID-19 vaccination had a low level of education and 19 (61.3%) pregnant women who had not had the COVID-19 vaccination had a high education level. As many as 1 (3.2%) of pregnant women who had received the COVID-19 vaccination had a low level of education and 9 (29.0%) of pregnant women who had had the COVID-19 vaccination had a high level of education. The statistical test results obtained p value = 0.704 (> 0.05) so there is no relationship between the variable education level of pregnant women and COVID-19 vaccination, with an Odd Ratio (OR) = 0.947 (0.76-11.870).

In contrast to the results of a study conducted by Siti Karimah, et al (2021), the statistical test results showed that there was a relationship between pregnant women's education and participation in the COVID-19 booster vaccination, with a moderate level of closeness, with a p value = 0.001 (Karimah et al., 2021). It is also different from the results of a study conducted by Debby Yolanda, et al (2021) showing that there is a relationship between maternal education and the perceptions of pregnant and postpartum women regarding the Covid -19 vaccination with a p value = 0.015 (Yolanda et al., 2021).

According to the researchers' assumptions there is a gap between theory and research results, one of the factors that can affect a person's knowledge is the level of education, according to Budiman and Riyanto (2013) a person's formal education has a great influence on knowledge (Budiman, 2013). However, in the results of the study there were respondents who had low education but had a good level of knowledge about the importance of the COVID-19 vaccination so they carried out the COVID-19 vaccination, and there were also respondents with higher education but did not have good knowledge about the importance of the COVID-19 vaccination and did not vaccinate against COVID-19. This can be due to the fact that currently information about the importance of the Covid 19 vaccination can be obtained easily through social media, besides that counseling is being continuously carried out by the Puskesmas and the Health Service.

Based on the results of the study it was found that 3 (9.7%) pregnant women who had not had the COVID-19 vaccination had normal anxiety, 8 (25.8%) pregnant women who had not had the COVID-19 vaccination had mild anxiety and 10 (32.2%) pregnant women those who have not done the COVID-19 vaccination have moderate anxiety. As many as 7 (22.6%) pregnant women who had received the COVID-19 vaccination had normal anxiety, 2 (6.5%) pregnant women who had had the COVID-19 vaccination had moderate anxiety, and as many as 1 (3.2%) pregnant women who had had the vaccination COVID-19 has moderate anxiety. The statistical

test results obtained p value = 0.007 (< 0.05) so there is a relationship between the variable anxiety of pregnant women and COVID-19 vaccination in pregnant women.

The results of this study are different from the results of research conducted by Putu Dinda Pramesti, et al (2021) showing that the results of statistical tests using Mann Whitney in Table 4.7 show that the value of the significance level is p = 0.497 or p > 0.05 which indicates that there is no significant difference significantly between the anxiety levels of respondents who have not and those who have received the COVID-19 vaccine. However, it can be seen that there is a difference in the average score of 13.05 where respondents who have not received the COVID-19 vaccine have a higher average anxiety score of 128.88. (p = 0.497 or p > 0.05) (Pramesti et al., 2021). In line with the results of the research by Nike Setyaningrum, et al (2021) showing that the results of the data analysis test showed a significant relationship between knowledge and the level of anxiety about the covid-19 vaccine in pregnant women at the Kasihan 1 Health Center, Bantul, Yogyakarta, with a significant value of 0.000 (Setyaningrum et al., 2021).

The researcher's assumption is that anxiety, which was one of the problems that occurred during the Covid-19 pandemic, turned out to be a problem when the Covid-19 vaccine was available. The cause of this anxiety was hoax information which made people anxious and in the end there was a negative response and could have an impact on psychosomatics. Accurate and reliable information can help individuals plan appropriate actions even if the situation seems vulnerable with the media presenting inaccurate information. On the other hand, wrong information will create anxiety and panic responses that can hinder individual responses in taking appropriate action. Good knowledge will increase the patient's willingness to be vaccinated. Comprehensive health education for the community and pregnant women will be able to increase knowledge, willingness to be vaccinated and reduce anxiety. In addition, family support and support from health workers can be an effort to reduce anxiety in pregnant women to vaccinate against COVID-19. The anxiety that pregnant women feel is fear of contracting COVID-19 and fear of the side effects given by the COVID-19 vaccination.

Based on the results of the study, it was found that 16 (51.6%) pregnant women who had not had the COVID-19 vaccination said that the role of health workers was not good, 5 (16.1%) pregnant women who had not had the COVID-19 vaccination said that the role of health workers was good. As many as 1 (3.2%) of pregnant women who had received the COVID-19 vaccination said that the role of health workers was not good and 9 (29.0%) of pregnant women who had had the COVID-19 vaccination said that the role of health workers was good. The statistical test results obtained p value = 0.001 (< 0.05) so there is a relationship between the variable role of health

workers and COVID-19 vaccination in pregnant women with an Odd Ratio (OR) = 28,800 (2,896-286,425).

The results of this study are in line with research conducted by Rina Sari Yuliyaningsih, et al (2021) which showed that the statistical test results obtained p-value = 0.006, which means p <α (0.05), so it can be concluded that there is a relationship between the role of health workers and compliance with COVID-19 vaccination for pregnant women in Metro City in 2021, with an OR of 8,229 meaning that respondents with negative health worker roles have an 8.2 times risk of not complying with COVID-19 vaccination when compared to positive health worker roles (Yuliyaningsih et al., 2021). This is also in line with research conducted by Tria Nopi Herdiani, et al (2021) which shows that the results of the chi-square test using the Continuity Correction Chi Square test are p = 0.000 < α = 0.005. These results indicate that there is a relationship between the role of health workers and the interest of pregnant women in participating in the COVID-19 vaccination program in the working area of the Muara Kelingi Health Center, Musi Rawas Regency (Herdiani et al., 2021).

According to the researchers' assumptions, the ability of health workers both in terms of education, knowledge and attitudes must be properly actualized, such as in motivating pregnant women to want to come to health services to carry out the COVID-19 vaccine, health workers must be able to convey the benefits of the vaccine so that can influence the public, especially pregnant women, to comply with the COVID-19 vaccine according to the schedule. The role of the puskesmas or health workers in vaccine activities is as a facilitator and further empowers the community in these vaccine activities. Vaccine activity is said to increase if the participation of the community is higher which is manifested in the scope of the Health program. The unfavorable role of health workers according to respondents was the lack of information provided by officers regarding the COVID-19 vaccination.

V. CONCLUSION

There is a relationship between the variable anxiety of pregnant women and the COVID-19 vaccination. The statistical test results obtained p value = 0.001 (<0.05) there is a relationship between the role of health workers and the COVID-19 vaccination. It is hoped that pregnant women will want to vaccinate against COVID-19.

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