

Perception Of Pregnant Mothers And Willingness To Vaccinate Against Covid-19

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ABSTRACT

Pregnant women are a group that is vulnerable to Covid-19 due to physiological changes that result in changes in response to Covid-19 infection. Pregnant women with Covid-19 are at risk for preeclampsia, stillbirth, premature birth, and maternal death. The magnitude of the impact, it is necessary to have a Covid-19 vaccine to reduce the incidence and reduce the severity caused by Covid-19, especially in pregnant women. This study aims to determine the relationship between knowledge, perception, and disease history with the willingness of pregnant women to take the Covid-19 vaccine. This research is a descriptive analytic with a cross sectional study design. The population is all pregnant women in the second and third trimesters who are in the Work Area of the Tomalehu Health Center, West Seram Regency, as many as 41 respondents. The sample is pregnant women in the second and third trimesters who are in the Working Area of the Tomalehu Health Center as many as 37 respondents with purposive sampling. Processing and analysis using Chi Square test. The results showed that there was a relationship between perception ($p = 0.000$) and the willingness of pregnant women to vaccinate against Covid-19. Researchers suggest that health workers and the government should increase the socialization of giving vaccinations to pregnant women. vaccination coverage can be increased.

Keywords: Covid-19 vaccination, pregnant mother, perception

Introduction

Coronavirus disease is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) which can cause mild, moderate or severe symptoms. The Covid-19 virus can be transmitted through direct and indirect contact. There is an increase in the number of cases of Covid-19 every day and attacks at all ages, without exception pregnant women.(Kemenkes, 2021) In 2021 in the US there are 99,000 pregnant people infected with Covid-19 with a death toll of 109 people.(Shook *et al.*, 2021) In Brazil there were 124 who died out of 854 pregnant and postpartum women infected with Covid-19.(Takemoto *et al.*, 2020)

Pregnant women are a group that is vulnerable to Covid-19 due to physiological changes resulting in a change in response to Covid-19.(Wastnedge EAN, Reynolds RM, van Boeckel SR, 2021) Pregnant women with Covid-19 are at risk for preeclampsia, stillbirth, premature birth,(Wei *et al.*, 2021) and an increased risk of maternal death.(Allotey *et al.*, 2020) To break the chain of spread of Covid-19, a Covid-19 vaccine is needed. Vaccines are not only given to adults, children. However, pregnant women in the second and third trimesters are also recommended to vaccinate. Vaccines for pregnant women aim to provide protection for the mother and fetus, so as to reduce the severity if infected with Covid-19. (Cavan, 2021) However, the obstacle in using the Covid-19 vaccine is public distrust of vaccines. Public assessment of its safety and effectiveness will have an impact on the participation of pregnant women in using vaccines.

Data profil Kesehatan Indonesia tahun 2020 menunjukkan bahwa provinsi Maluku merupakan daerah dengan kasus positivity rate tertinggi ke-3 (43,7%).(Kemenkes, 2021) The high positivity rate indicates that the transmission of transmission is high and there may be many people with Covid-19 in the

community who have not been tested. The high rate of transmission can have an impact on increasing the number of cases both in the general public and pregnant women. For this reason, protection is needed, such as the Covid-19 vaccine to reduce the incidence and reduce the severity caused by Covid-19. Maluku Province is the area with the second lowest 2nd dose of Covid-19 Vaccine coverage in Indonesia with a coverage rate of 35.89% (Kemenkes., 2022) and the western part of Seram district is the district with the lowest vaccine coverage in Maluku Province (43.37%). (Kemenkes RI, 2022)

Based on the results of initial interviews conducted by researchers in the Tomalehu Health Center Working Area, it was found that most pregnant women were afraid and unwilling to take the Covid-19 vaccine due to their doubts about the vaccine and the amount of negative information on social media about the Covid-19 vaccination. This study aims to determine the relationship between knowledge, perception, and disease history with the willingness of pregnant women to take the Covid-19 vaccine in the Working Area of the Tomalehu Health Center so that it can be seen how the coverage of covid-19 vaccination for pregnant women and what actions need to be taken so that the coverage of the covid-19 vaccine can increase.

Method

The type of this research is descriptive analytic with a cross sectional study design which was carried out in the Working Area of the Tomalehu Health Center, West Seram Regency. The location was chosen because of the low Covid-19 vaccination coverage and based on initial observations where there were pregnant women who were afraid and reluctant to get the Covid-19 vaccine. The time of the study was carried out on 27 May-16 June 2022. The sample was pregnant women in the second and third trimesters as many as 37 respondents using purposive sampling with inclusion criteria, namely mothers whose gestational age was 13-33 weeks and exclusion criteria were pregnant women who had received the Covid-19 vaccine. 19 before pregnancy. Data analysis used Chi Square test with a significance level of $p < 0.05$.

Results

Table. 1 Distribution of Characteristics of Respondents in Tomalehu Health Center, West Seram Regency

characteristics	n	%
Age		
20 Years	3	8,1
21 – 30 Years	21	56,8
> 30 Years	13	35,1
Education		
Low (Did not finish SD, SD & SMP)	5	13,5
High (SMA&Academy/PT)	32	86,5
Gestational Age		
Second Trimester	21	56,8
Third Trimester	16	43,2
PBJS		
Yes	19	51,4
No	18	48,6
Total	37	100

Table 1 shows that respondents were dominated by 21-30 years old at 56,8%, High (SMA&Academy/PT) at 81,1%, Gestational Age in Second Trimester at 56,8% and have BPJS at 51,4%

Table. 2 Perception and Willingness of Pregnant Women to Vaccinate Covid-19 in the Working Area of the Tomalehu Health Center, West Seram Regency

Perception	Willingness to vaccinate against Covid-19				Total		<i>p-value</i>
	Yes		No		n	%	
	n	%	n	%			
Perception							
Positif	9	75,0	3	25,0	12	100	0,000
Negatif	2	8,0	23	92,0	25	100	
Total	11	29,7	26	70,3	37	100	

Table 2 shows that of the 9 respondents who had a positive perception of Covid-19 vaccination, 75.0% of respondents had already vaccinated and this result was higher than respondents who had a negative perception of Covid-19 vaccination and only 8.0% were vaccinated. . The results of the analysis with Fisher Exact obtained p value = 0.000, meaning that there is a relationship between perception and willingness to participate in the Covid-19 vaccination.

Discussion

The perception in this study is the impression or interpretation of pregnant women regarding the Covid-19 vaccination. Perception is the ability of the brain to translate stimuli that enter the human senses. Everyone's perception of something is different for humans, there are differences, there are positive and negative and later this can affect the person's actions. Perception is also a process of receiving stimuli by the senses that begins with attention so that a person is able to know, interpret and appreciate the things observed, both those outside and within the individual.

People's perceptions of the use of vaccines vary, some are positive and some are negative for various reasons. Negative and erroneous perceptions about the Covid-19 vaccine will cause the public participation rate to receive vaccinations to decrease, this will result in the spread of Covid-19 being out of control. Tinungki in his research revealed that the positive perception of the community includes the government's efforts to provide socialization related to the Covid-19 vaccine, immunity is getting stronger after the Covid-19 vaccine is given, breaking the chain of transmission. While the negative perceptions of the public include the Covid-19 vaccine related to the anti-crisis (666), fear of side effects, vaccine insecurity, fulfillment of the sign of the end of time. (Tinungki *et al.*, 2022)

Based on the results of the study, it is known that most respondents have a negative perception (67.6%) about the Covid-19 vaccine. The negative perception of respondents in this study was due to the lack of information obtained regarding vaccines that are used to form artificial antibodies and can reduce the impact when exposed to COVID-19. In addition, the circulation of hoax / false news related to the covid-19 vaccine in the community has made people's perceptions decline. Respondents thought that the covid-19 vaccination was unsafe, doubted the halalness of the ingredients used to make the vaccine and the quality of the injected vaccine, and was afraid of the impact of the covid-19 vaccine injection itself. The respondents thought that the vaccine that was inserted into their body would harm the fetus in their stomach.

Dina Kholidiyah in her research also revealed the same results where the majority of respondents had a negative perception about the covid-19 vaccination (54.9%) which was due to insufficient information related to the covid-19 vaccination.(Dina Kholidiyah, Sutomo, 2021) In addition, Tinungki (2022) revealed that with the lack of public acceptance of the COVID-19 vaccine, socialization related to vaccines from health workers is needed which will later increase the knowledge and understanding of the public who are lacking in vaccine safety.(Tinungki *et al.*, 2022)

The results of the analysis show that there is a relationship between perception and willingness to take part in the Covid-19 vaccination. This means that the perception that pregnant women have can influence them to take part in the Covid-19 vaccination. Pregnant women with a positive perception of Covid-19 vaccination will be willing to vaccinate against Covid-19 and vice versa, pregnant women who have a negative perception of Covid-19 are less likely to be willing to vaccinate against Covid-19.

This research is similar to Virginia's research that public perception of Covid-19 greatly affects community participation in carrying out Covid-19 vaccinations. People with negative perceptions about Covid-19 have an impact on the rejection of the vaccination process.(Virgiana, Abdul Munawwir, 2021) In addition, a survey conducted by the Ministry of Health in 2021 showed that most people believe that the occurrence of this pandemic is an engineering, conspiracy, deception, or condition that is deliberately created by certain individuals to frighten the community to gain profit. Negative information in the

community can affect public perception and acceptance of the Covid-19 vaccine.(Kementerian Kesehatan RI, 2021)

Conclusion

The conclusion of the study is that perception is related to the willingness to vaccinate against Covid-19. Health workers and the government are expected to further increase the dissemination of vaccination for pregnant women so that vaccination coverage can increase.

References

- Allotey, J. *et al.* (2020) 'Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: Living systematic review and meta-analysis', *The BMJ*, 370. doi: 10.1136/bmj.m3320.
- Cavan, M. (2021) 'COVID-19 Vaccination in Pregnancy: The Benefits Outweigh the Risks', *Journal Obstetrics and Gynaecology Canada*, 43(7), pp. 814–816.
- Dina Kholidiyah, Sutomo, N. K. (2021) 'Hubungan Persepsi Masyarakat Tentang Vaksin Covid-19 Dengan Kecemasan Saat Akan Menjalani Vaksinasi Covid-19', *Jurnal Keperawatan*, (October).
- Kemendes. (2022) *Vaksinasi COVID-19 Nasional [Data per Tanggal 2 Februari 2022 Pukul 18.00 WIB]*. Available at: <https://vaksin.kemkes.go.id/#/vaccines> (Accessed: 3 February 2022).
- Kemendes (2021) *Profil Kesehatan Indonesia Tahun 2020*. Jakarta: Kementerian Kesehatan RI.
- Kemendes RI (2022) *Vaksinasi COVID-19 Berdasarkan Provinsi dan Kabupaten/ Kota [Data per Tanggal 2 Februari 2022 Pukul 18.00 WIB]*. Available at: https://vaksin.kemkes.go.id/#/detail_ (Accessed: 3 February 2022).
- Kementerian Kesehatan RI (2021) *Survei Penerimaan Vaksin Covid-19 di Indonesia, Kementerian Kesehatan RI*. Available at: https://covid19.go.id/storage/app/media/Hasil_Kajian/2020/November/vaccine-acceptance-survey-id-12-11-2020final.pdf (Accessed: 8 June 2022).
- Shook, L. L. *et al.* (2021) 'COVID-19 Vaccination in Pregnancy and Lactation: Current Research and Gaps in Understanding', *Frontiers in Cellular and Infection Microbiology*, 11(September), pp. 1–8. doi: 10.3389/fcimb.2021.735394.
- Takemoto, M. L. S. *et al.* (2020) 'The tragedy of COVID-19 in Brazil: 124 maternal deaths and counting', *International Journal of Gynecology and Obstetrics*, 151(1), pp. 154–156. doi: 10.1002/ijgo.13300.
- Tinungki, Y. L. *et al.* (2022) 'Persepsi Masyarakat terhadap Vaksinasi Covid-19: Studi Kualitatif di Indonesia', *Jurnal Kesehatan Masyarakat Indonesia*, 17(1), p. 67. doi: 10.26714/jkmi.17.1.2022.67-72.
- Virgiana, Abdul Munawwir, I. P. K. D. (2021) 'Persepsi Masyarakat Terhadap Vaksinasi Covid-19 Di Area Kerja Puskesmas Donggala', *Preventif: Jurnal Kesehatan Masyarakat*, 10(2), pp. 366–377. Available at: <http://jurnal.fkm.untad.ac.id/index.php/preventif>.
- Wastnedge EAN, Reynolds RM, van Boeckel SR, et al. P. and C.-19. P. R. 2021;101(1):303-318. doi:10.1152/physrev.00024.202. (2021) '4'.
- Wei, S. Q. *et al.* (2021) 'The Impact Of Covid-19 On Pregnancy Outcomes: A Systematic Review and Meta-Analysis', *Cmaj*, 193(16), pp. E540–E548. doi: 10.1503/cmaj.202604.