



Volume 14 Nomor 1 (2023) 21-24

# JURNAL KEBIDANAN

p-ISSN: 2089-7669 ; e-ISSN: 2621-2870

<https://doi.org/10.31983/jkb.v14i1.8503>



## Descriptive Study Midwives Perception of Giving Sinovac Vaccine for Pregnant Women to Prevent Transmission of Covid-19

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Received: April 25th 2022; Revised: Februari 19th 2023; Accepted: April 30th 2024

### ABSTRACT

During the Covid-19 pandemic, routine maternal and infant health services such as pregnancy checks, there are restrictions to reduce the risk of transmission in covid 19. This research is descriptive research. The sampling technique was a total sampling with the number of samples as many as 20 midwives in the Pamekasan City Area. The analysis used in this study was a univariate analysis using frequency distribution tables. The results showed that almost all midwives have never given sinovac vaccine to pregnant women to prevent transmission of the Covid-19 virus, sinovac vaccine administration in pregnant women most midwives consider it necessary, about 60% of midwives have a perception that the right time for sinovac vaccine administration in pregnant women is in the second trimester. It is hoped that there will be an increase in the scope of sinovac vaccine administration in pregnant women so as to prevent the transmission of the Covid-19 virus in pregnant women.

Keywords: midwives perception, sinovac vaccine, pregnant woman, transmission, covid-19

### Introduction

The World Health Organization (WHO) officially declared Covid-19 a pandemic on March 11, 2020. Symptoms of Covid-19 patients include cough, fever, diarrhea, shortness of breath, myalgia, headache, sore throat, and fatigue [1]. The average incubation period is 5-6 days with the longest incubation period being 14 days. Transmission is through close contact and droplets, not through airborne transmission. People at risk of infection are those who are in close contact with people who are positive for Covid-19 [2]. Covid-19 attacks all ages, including pregnant women, who are one of the vulnerable groups. Covid-19 during pregnancy is associated with a considerable risk of morbidity and mortality in mothers and their babies, especially in pregnant women with previous comorbidities for example in pregnant women with obesity, diabetes, hypertension or chronic heart and respiratory diseases. Physiologically, pregnant women experience changes in body and immunity, thereby increasing susceptibility to disease infections [3].

Pregnancy during the Covid-19 pandemic has a high risk because pregnant women are very vulnerable to being infected with the SARS-CoV-2 virus [4]. About 51.9% of pregnant women infected with Covid-19 are asymptomatic, 72% of infections occur in pregnancies above 37 weeks, 45% require intensive care and the mortality rate is 3%. Pregnant women are vulnerable to the direct effects of Covid-19 infection and the indirect effects of declining health service performance during periods of social interaction restrictions. During the Covid-19 pandemic, there are restrictions on almost all routine maternal and infant health services, such as postponement of pregnancy checks, postponement of class activities for pregnant women because pregnant women are worried about being infected by the Covid-19 virus [5].

Normal pregnancy checks during the Covid-19 pandemic, at least pregnant women make 6x visits with details of 2x in the 1st trimester, 1x in the 2nd trimester and 3x in the 3rd trimester. At least 2x checked by a doctor during visit 1 in trimester 1 and during visit 5 in trimester 3 while still implementing

health protocols [5]. Pregnancy checks in health care facilities are a necessity that must be obtained by pregnant women, but during this pandemic there has been a decrease in health service coverage, one of which is the low coverage of sinovac vaccine for pregnant women to reduce the spread of Covid-19 [6].

During pregnancy, the mother's immune system will experience drastic and dynamic changes to support fetal growth and development. The severity and clinical manifestations of Covid-19 in pregnant women can be influenced by several risk factors such as pregnancy at an old age (age  $\geq 35$  years), the presence of comorbidities, obesity, diabetes both historical and gestational, hypotension, preeclampsia (which is being experienced or historical from previous pregnancies). SARS CoV 2 virus infection can cause a cytokine storm in the body so that a series of immune responses arise and the function of peripheral leukocytes and other immune cells changes so that they are at risk of causing pregnancy complications [7]. Complications of Covid-19 are pneumonia, acute severe respiratory distress syndrome, kidney failure or even death in certain cases.

The Indonesian government involves all parties, both from the government itself and from the community as a form of strategy to control the spread of Covid-19. Efforts made include 3T (test, treat and trace), community empowerment by carrying out appropriate health protocols and providing vaccinations for the formation of herd immunity [8]. WHO recommends the sinovac vaccine for pregnant and lactating women to prevent infection due to the covid 19 virus. This vaccine is recommended because the benefits outweigh the risks it poses. This vaccine contains the inactivated SARS-CoV-2 virus. Sinovac is an inactivated vaccine, a viral RNA base, protein subunit, or viral vector, cannot replicate compared to other vaccines of the same type. The administration of the sinovac vaccine can stimulate the immune system to recognize this inactivated virus and produce antibodies to fight the virus so that Covid-19 infection does not occur [9].

The administration of the first dose of the inactivated sinovac virus vaccine begins in the second trimester of pregnancy and the administration of the second dose is carried out according to the interval of the sinovac vaccine, which is 28 days from the administration of the first dose. However, vaccination coverage in Pamekasan Regency is still very low at around 33.33% and has not reached the minimum vaccination coverage target set by the Government, which is 70%. The

implementation of vaccination for pregnant women is the same as the implementation of vaccination in the general community, which is carried out at the Puskesmas or at mass vaccination locations which are often held by the Covid-19 Task Force at the Pamekasan Regency Government. The administration of the Covid-19 vaccine must be carried out by doctors, nurses or midwives who have the competence and authority in accordance with the provisions of laws and regulations.

The purpose of this study is to describe the perception of midwives in administering the sinovac vaccine to pregnant women to prevent transmission of the Covid-19 virus in the Pamekasan City Area. Based on the explanation above, it is important for pregnant women to take precautions against Covid-19 transmission during pregnancy, especially in pregnant women with risk factors.

## Methods

The type of research used is descriptive research that aims to describe events systematically and emphasizes factual data rather than conclusions [10]. The variable in this study is a descriptive study of the implementation of sinovac vaccine administration to pregnant women to prevent Covid-19 transmission. The population in this study was all midwives in the Pamekasan City Area, which was as many as 20 midwives. The entire population in this study was used as a research sample, amounting to 20 midwives. The sampling technique used in this study is a non-probability sampling technique (saturated sampling / total sampling), which is a sampling technique by taking all members of the population into a sample [11]. The study was conducted in August 2021. The process of collecting data with the survey method by distributing questionnaires containing closed questions to midwives through google form as an online survey medium. After the data is collected, proceed with the process of processing data and presenting data so that the information or data presented is easier to interpret. The data analysis carried out is univariate analysis to explain or describe the characteristics of each research variable in the form of a Pie diagram [12]. The ethical test was conducted by the Health Research Ethics Commission of the College of Health Sciences (STIKES) Ngudia Husada Madura with information on ethical feasibility No. 1072/KEPK/STIKES-NHM/EC/VII/2021.

## Results and Discussion

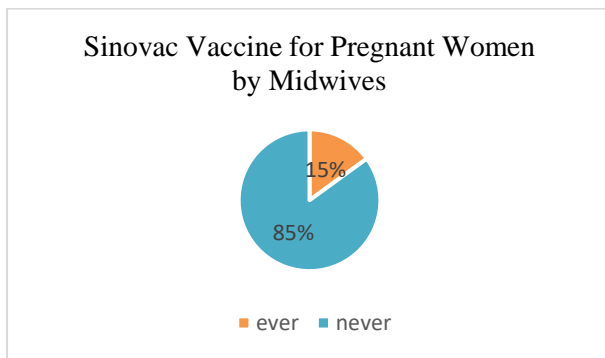


Figure 1 administration of sinovac vaccine to pregnant women by midwives

The results showed that almost all midwives had never given the sinovac vaccine to pregnant women to prevent transmission of the Covid-19 virus, which was as much as 85%. This happens because based on data from the coverage of sinovac vaccine administration to pregnant women, there are only 21 pregnant women who are willing to be injected with the first dose of sinovac vaccine and around 17 pregnant women who have been given the second dose of sinovac vaccine, the low coverage of vaccine administration to pregnant women is because many pregnant women refuse to be injected with the sinovac vaccine, which is around 76%. Based on information from midwives, many pregnant women refuse because they consider that the sinovac vaccine is still a new thing in pregnant women, so many pregnant women who are afraid of being vaccinated sinovac are worried that it will cause some side effects that can be harmful to pregnant women and their fetuses. In addition, the attitude and interest factors of pregnant women, husband support and the role of health workers are important to be increased so that the coverage of Sinovac vaccine for pregnant women has increased [13].

Prevention and control of virus transmission to pregnant women needs to be done appropriately and quickly [14]. Since August 2, 2021, the Ministry of Health has allowed the administration of vaccines to pregnant women, especially in high-risk areas. Vaccines that can be given to pregnant women are mRNA-based Covid-19 vaccines (Pfizer, BioNTech, and Moderna) and inactivated viruses (Sinovac). The administration of the first dose can be done in the 2nd trimester of pregnancy, while the second dose is given according to the interval of the type of vaccine given [7].

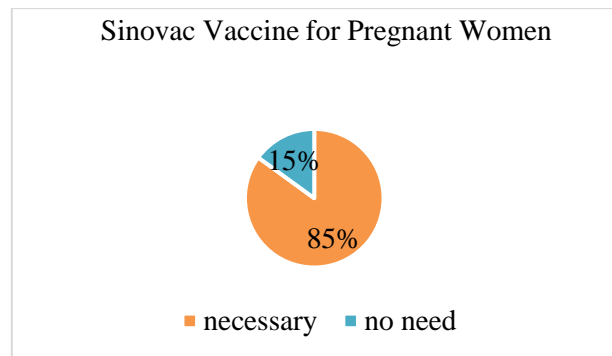


Figure 2 administration of sinovac vaccine to pregnant women

The results showed that giving the sinovac vaccine to pregnant women most midwives considered it necessary, midwives thought that giving the sinovac vaccine was able to prevent transmission of the covid 19 virus. The type of vaccine recommended in Indonesia for pregnant women according to the Indonesian Obstetrics and Gynecology Association (POGI) is the Sinovac vaccine, this vaccine is recommended for pregnant women over the age of 35 years, high BMI and have comorbidities such as hypertension and diabetes and high risk groups exposed to Covid-19 [15].

The sinovac vaccine is one of the vaccines that inactivates the virus, so according to POGI in 2021, it recommends the sinovac vaccine to prevent Covid-19 transmission to pregnant women. Giving vaccines to pregnant women can prevent pregnant women from having severe symptoms if later pregnant women are exposed to the Covid-19 virus. Vaccine administration can stimulate the production of antigens so as to boost the immune system by producing antibodies against SARS-CoV-2 proteins[15].

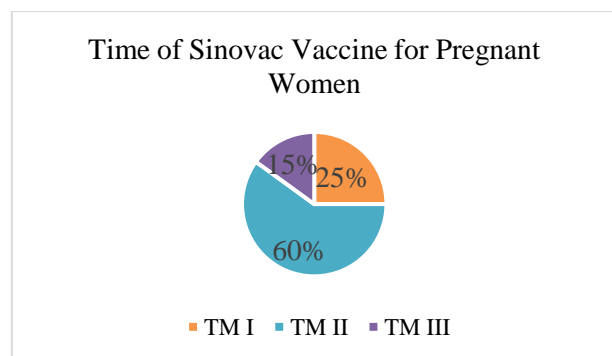


Figure 3 sinovac vaccine administration time on pregnant women

The results showed that about 60% of midwives stated the right time for giving sinovac vaccine to pregnant women, namely in the second trimester. Recommendations of the Indonesian

Obstetric Gynecology Association (POGI) related to the provision of safe vaccines to pregnant women, namely from 13 to 33 weeks of gestation. Pregnant women who get the inactivated virus-based vaccine (sinovac) with dose 1 and dose 2 at week 28 and week 32 of pregnancy do not give side effects after injection of dose 1 or dose 2 vaccine and give birth to healthy babies with term time of birth. Anti-SARS CoV-2 RBD antibodies were detected in the body of pregnant women 3 weeks after the 2nd dose of infant cord blood with indications of antibody transfer from maternal serum to cord blood serum. The results of other studies showed that no side effects were found after giving the sinovac vaccine in pregnant women. Anti-SARS CoV 2 IgA antibodies were also detected in breast milk 2 weeks after dose 1, breast milk antibody levels peaked at weeks 5 and 6 and remained detectable for up to 4 months post-vaccination. The results of this study certainly support WHO's recommendation to continue breastfeeding that after suffering from Covid-19[7].

### Conclusion

The results showed that almost all midwives never gave the sinovac vaccine to pregnant women to prevent transmission of the Covid-19 virus because pregnant women were still worried about the side effects caused after being injected with the Sinovac vaccine, giving the sinovac vaccine to pregnant women most midwives considered it necessary, Midwives assume that the administration of the Sinovac vaccine is able to prevent transmission of the Covid-19 virus and midwives have the perception that the right time for giving the Sinovac vaccine to pregnant women is in the Second Trimester.

### References

- [1] N. P. Astuti, E. G. Z. Nugroho, J. C. Lattu, I. R. Potempu, and D. A. Swandana, "Persepsi Masyarakat terhadap Penerimaan Vaksinasi Covid-19: Literature Review," *J. Keperawatan*, vol. 13, no. 3, pp. 569–580, 2021, doi: 10.32583/keperawatan.v13i3.1363.
- [2] A. Wulandari, F. Rahman, N. Pujianti, and Dkk, "Hubungan Karakteristik Individu dengan Pengetahuan tentang Pencegahan Coronavirus Disease 2019 pada Masyarakat di Kalimantan Selatan," *J. Kesehat. Masy. Indones.*, vol. 15, no. 1, 2020.
- [3] C. K. Herbawani, S. N. A. Cukarso, I. M. Maulana, and F. S. A. Utami, "Dampak Covid-19 pada Kesehatan IBu Hamil: Literature Review," *J. Kesehat. Metro Sai Wawai*, vol. 13, no. 2, 2020.
- [4] F. A. M. Nurrizka, Rahmah H., Yuri N., "Akses Ibu Hamil Terhadap Pelayanan Kesehatan di Masa Pandemi Covid 19," *J. Kebijak. Kesehat. Indones.*, vol. 10, no. 2, pp. 94–99, 2021.
- [5] P. P. Antenatal, *Pedoman pelayanan antenatal, persalinan, nifas, dan bayi baru lahir*. 2020.
- [6] N. Aeni, "Pandemi Covid-19: Dampak Kesehatan, Ekonomi dan Sosia," *J. Litbang Media Inf. Penelitian, Pengemb. dan IPTEK*, vol. 17, no. 1, 2021.
- [7] J. Jo, D. Matahari, A. Sanjaya, and S. N. A. Christy, *Covid 19 & Beyond*. Penerbit Andi.
- [8] D. Yolanda, Y. Ardiani, and D. Andriani, "Faktor yang mempengaruhi Persepsi Ibu Hamil dan Nifas terhadap Vaksinasi Covid-19 di Bidan Praktek Mandiri Kota Padang panjang," *J. Endur. Kaji. Ilm. Probl. Kesehat.*, vol. 7, no. 2, 2022.
- [9] M. D. C. Pane, "Vaksin Sinovac," *Alodokter*, 2021. <https://www.alodokter.com/vaksin-sinovac>.
- [10] Nursalam, *Metodologi Penelitian Ilmu Keperawatan*. Jakarta: PT Rineka Cipta, 2013.
- [11] M. Saepudin, *Metodologi Penelitian Kesehatan Masyarakat*. Pontianak: Trans Info Media, 2011.
- [12] A. A. Hidayat, *Metode Penelitian Kebidanan dan Teknik Analisis Data*. Surabaya: PT. Salemba Medika, 2014.
- [13] T. N. Herdiani, D. A. Ningsih, and W. Sari, "Faktor-faktor yang Berhubungan dengan Minat Ibu Hamil dalam Mengikuti Program Vaksinasi Covid-19 Di Puskesmas Muara Kelingi," *J. Keperawatan Mandira Cendikia*, vol. 1, no. 1, 2022.
- [14] R. Soliha, A. R. Fauzi, and R. A. Aripiani, "Pemberian Vaksinasi Covid-19 Bagi Ibu Hamil Pada Masa Pandemi," *J. Bimtas*, vol. 5, no. 1.
- [15] S. N. Sari and N. Islamy, "Vaksin Covid-19 Pada Ibu Hamil," *Medula*, vol. 11, no. 4, pp. 327–333, 2021.