

Analysis of the Factors at the Mlarak Health Center in Ponorogo Regency that Affect the Occurrence of Pregnancy Complications during the Covid-19 Pandemic

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ABSTRACT

Pregnancy, childbirth, and postpartum complications pose a significant threat to women's health as they are the leading cause of death for both mothers and newborns. 2020 has seen an increase in East Java's maternal mortality rate. East Java Province Health Profile, 2020 states that the province's maternal mortality rate was 89.81 per 100,000 live births in 2019 and 98.39 per 100,000 live births in 2020. Pregnant women at high risk are not the best. Pregnant women are among the vulnerable groups that the Covid-19 virus targets, so it also raises the number of maternal deaths. The virus affects people of all ages. Thus, at the Mlarak Health Center in the Ponorogo Regency, researchers are interested in finding out what factors may contribute to the occurrence of pregnancy complications during the Covid-19 pandemic.

Keywords: ANC visit, attitude, covid-19, infrastructure, pregnancy complications

BACKGROUND

Pregnancy, childbirth, and postpartum complications pose a significant threat to women's health as they are the leading cause of death for both mothers and newborns. According to estimates from the World Health Organization (WHO), 585,000 women die from pregnancy-related and childbirth-related complications every minute. Maternal deaths are directly caused by complications during pregnancy, childbirth, and the postpartum period. The number of maternal deaths increases with the presence of complications (WHO, 2015). The maternal mortality rate (MMR) is extremely high, with 810 women dying every day from complications during pregnancy and childbirth and approximately 295,000 women dying after giving birth or during the postpartum period, according to data provided by the World Health Organization (WHO) in 2020.

COVID-19 attacks all ages, including vulnerable groups, one of which is pregnant women. During pregnancy, physiological changes occur in the mother's body and immunity, which causes an increase in susceptibility to infectious diseases (Zaigham & Andersson, 2020). Coronavirus disease 2019 (COVID-19) is a respiratory tract infection caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), or often called the Corona virus. This virus is a zoonotic pathogen that has a high mutation rate, and can persist in humans and animals with various clinical presentations, ranging from asymptomatic, mild to severe symptoms, to death.

Based on the results of the inter-census population survey (SUPAS, 2015), the number of MMR in Indonesia is 305/100,000 live births, which is 3 times higher than the MDGs target of 102/100,000 live births. The maternal mortality rate in East Java also increased in 2020. This is due to restrictions on prenatal check-up visits so that screening for high-risk pregnant women is less than optimal. In 2019, the Maternal Mortality Rate for East Java Province

reached 89.81 per 100,000 live births. This figure has increased compared to 2020 which reached 98.39 per 100,000 live births (East Java Province Health Profile, 2020).

Since the Coronavirus disease 2019 (COVID-19) pandemic, cases of pregnancy complications in the Mlarak Community Health Center work area have also increased. Based on data obtained from the KIA section of the Mlarak Community Health Center, there were 229 cases of pregnancy complications during the 11 month period from January to November 2021, consisting of 67 cases of anemia, 50 cases of CED, 2 cases of hyperemesis, 12 cases of abortion, 10 cases of preeclampsia, 2 cases of pregnant women with HBSAg, 8 cases of pregnant women suffering from Covid and the number of other maternal cases was 78 cases. This has exceeded the target set, namely 80 cases/year or 189% higher than the target set. (Mlarak Health Center Secondary Data, 2021). From the results of a preliminary study conducted with in-depth interviews with 10 respondents in the Mlarak area, it was found that 8 respondents did not make regular Antenatal Care (ANC) visits, while 2 respondents thought that other factors including the age distance between children and the number of children had an influence on these factors. influential factors in the preliminary study.

METHODS

This study used a cross-sectional methodology and was quantitatively descriptive in nature. With a sample size of 166 respondents, the study's population consisted of 284 respondents. In this study, simple random sampling was the sample method employed. Utilizing data analysis, the chi square statistical test with an $\alpha=0.05$ significance level is used to determine the relationship between the independent and dependent variables. Additionally, word has reached us that this research has cleared the ethical review.

RESULTS

Table 4.1. Characteristics of Respondents Based on Age

No	Age	Frequency	Percentage
1	< 20 tahun	6	3,6 %
2	20-35 tahun	124	74,7 %
3	>35 tahun	36	21,7 %

Based on table 4.1. It was found that from 166 pregnant women respondents at the Mlarak health center, 124 people were aged 20 to 35 years (74.7%).

Table 4.2. Characteristics of Respondents Based on Education

No	Level Education	Frequency	Percentage
1	SD	10	6,024 %
2	SMP	28	16,9 %
3	SMA/SMK	75	45,2 %
4	D1	5	3,01 %
5	D3	9	5,4 %
6	S1	35	21,07 %
7	S2	4	2,4 %

Based on table 4.2, it was found that of the 166 pregnant women respondents at the Mlarak health center, 75 were high school/vocational school graduates (45.2%).

Table 4.3. Characteristics of Respondents Based on Occupation

No	Job	Frequency	Percentage
1	IRT	61	36,7 %
2	Swasta	46	27,7 %
3	Wiraswasta	25	15,1%
4	PNS	23	13,8 %
5	Dosen	4	2,4 %
6	Petani	5	3,1 %
7	BUMN	2	1,2 %

Based on table 4.3, it was found that of the 166 pregnant women respondents at the Mlarak health center, 61 people were housewives (36.7%), 46 people were in the private sector (27.7%), 25 people were entrepreneurs (15.1%), civil servants 23 people (13.8%), 4 lecturers (2.4%), 5 farmers (3.1%), and 2 people in BUMN (1.2%).

Table 4.4. Characteristics of Respondents Based on Maternal Status

No	Mother Status	Frequency	Percentage
1	Primipara	72	43,4 %
2	Multipara	94	56,6 %

Based on table 4.4, it was found that of the 166 pregnant women respondents at the Mlarak health center, 94 were multiparous (56.6%).

Table 4.5. Characteristics of Respondents Based on Childbirth Process

No	Mother Status	Frequency	Percentage
1	Spontan	128	77,1%
2	Secarea	38	22,9 %

Based on table 4.4, it was found that of the 166 pregnant women respondents at the Mlarak health center, 128 people gave birth spontaneously (77.1%)

Variable Characteristics

Dependent Variable

Pregnancy Complications During the Covid-19 Pandemic

Table 4.6. Pregnancy Complications Frequency Table

No	Status Pregnancy	Frequency	Percentage
1	Complications	52	31,3 %
2	No Complications	114	68,7%

Based on table 4.6, from the total sample of pregnant women at the Mlarak health center which was used by 166 respondents, it was found that the number of pregnant women who did not experience complications was 114 people (68.7%)

Independent Variable

ANC visit

Table 4.7. ANC Visit Frequency Table

No	Visit ANC	Frequency	Percentage
1	Routine	106	63,9 %
2	No Routine	60	36,1 %

Based on table 4.7, from the total sample of pregnant women at the Mlarak health center, which was used by 166 respondents, it was found that the number of pregnant women who made regular ANC visits was 106 people (63.9%)

Infrastructure

Table 4.8. Frequency Table of Infrastructure Facilities

No	Means Infrastructure	Frequency	Percentage
1	Difficulty finding health facilities	142	85.5 %
2	No trouble	24	14,5%

Based on table 4.8, from the total sample of pregnant women at the Mlarak health center which was used by 166 respondents, it was found that the number of pregnant women who stated that they had difficulty finding available health facilities during the Covid-19 pandemic to carry out examinations was 142 people (85.5%).

Attitude

Table 4.9. Attitude Frequency

No	Attitude	Frequency	Percentage
1	Afraid	92	55,4 %
2	No Afraid	74	44,6%

Based on table 4.9, from the total sample of pregnant women at the Mlarak health center, which was used by 166 respondents, it was found that the number of pregnant women who were afraid of the transmission of the Covid-19 virus was 92 people (55.4%).

Cross Tabulation Between Variables

Relationship between ANC visits and pregnancy complications

Table 4.10. Chi-Square Tests of the Relationship between ANC Visits and Pregnancy Complications

Pregnancy complications during the Covid-19 pandemic	Visit ANC			
	No routine(F)	%	Routine(F)	%
Not influenced	48	28.9	66	39.8
Influenced	12	7.2	40	24.1
P value = 0,013	$\alpha = 0,05$			

Based on table 4.10, the results of the correlation test regarding the relationship between ANC visits and pregnancy complications, obtained a significant value of 0.013, which is a value smaller than 0.05, so it can be concluded that there is a relationship between ANC visits and

pregnancy complications.

Relationship between Infrastructure and Pregnancy Complications

Table 4.11. Chi-Square Tests of the Relationship between Infrastructure and Pregnancy Complications

Pregnancy complications during the Covid-19 pandemic	Infrastructure			
	There isn't any (F)	%	Any (F)	%
Not influenced	22	13.2	92	55.5
Influenced	2	1.2	50	30.1
P value = 0,005		$\alpha = 0,05$		

Based on table 4.11, the results of the correlation test on the relationship between infrastructure and pregnancy complications obtained a significant value of 0.005, which is a value smaller than 0.05, so it can be concluded that there is a relationship between infrastructure and pregnancy complications.

Correlation of Attitudes towards Pregnancy Complications

Table 4.12. Chi-Square Tests of the Relationship between Attitudes towards Pregnancy Complications

Pregnancy complications during the Covid-19 pandemic	Attitude			
	Negatif (F)	%	Positif (F)	%
Not influenced	59	35.6	55	33.2
Influenced	15	9.0	37	22.2
P value = 0,004		$\alpha = 0,05$		

Based on table 4.12, the results of the correlation test on the relationship between attitudes towards pregnancy complications obtained a significant value of 0.004, which is smaller than 0.05, so it can be concluded that there is a relationship between attitudes towards pregnancy complications.

DISCUSSION

Relationship between ANC visits and the occurrence of pregnancy complications during the Covid-19 pandemic

Antenatal care (ANC) is an antenatal service provided to pregnant women. Services are provided to prepare for labor and birth in order to prevent, overcome and detect problems that may arise during pregnancy. Problems or complications that occur can result in maternal death and increase the maternal mortality rate (MMR) in Indonesia. For this reason, the government has created an antenatal care program policy with a minimum visit frequency of 6 times during pregnancy and applies a minimum service standard of "7T" in its implementation. Based on the results of the analysis of the relationship between ANC visits and the occurrence of pregnancy complications during the Covid-19 pandemic at the Mlarak health center, analysis

was carried out using statistical correlation tests, obtaining a coefficient value of 0.013 ($p < 0.05$), meaning H1 was accepted. H1 is accepted, which means there is a relationship between ANC visits and the occurrence of pregnancy complications during the Covid-19 pandemic at the Mlarak health center.

The large number of pregnant women who do not have their pregnancies checked during the Covid-19 pandemic means that early detection of pregnancy complications is too late to recognize. This can be caused by various factors. Predisposing factors that can influence pregnant women's compliance with ANC visits include age, education level, occupation, parity of pregnant women, knowledge of pregnant women, pregnancy spacing, and attitudes of pregnant women. As for enabling factors, enabling factors are factors that facilitate behavior or actions and include the availability of facilities and infrastructure or health facilities for the community, such as hospitals, polyclinics, posyandu, doctors or private practice midwives. The possible influencing factors are distance from residence, family income, and information media. Reinforcing factors are factors that encourage or strengthen health behavior towards a person which includes the attitudes and behavior of community leaders, religious leaders and health workers. Reinforcing factors that influence pregnant women's compliance with ANC visits include husband's support, family support, and health worker factors. This is also in line with Rahmi's research (2021), that family support has a big influence on the success of visiting pregnant women. According to researchers, family support plays a very important role in ANC visits for pregnant women, because family support is very meaningful for pregnant women. The support referred to also means emotional support, action support and economic support. In order for families to support the implementation of ANC visits, families must be given information about the importance of ANC examinations that comply with standards so that the health of the mother and fetus can be determined and detect abnormalities and danger signs early during pregnancy.

According to research by Ningsih (2017), the higher a person's education will influence a person's behavior in making visits. On the other hand, lack of education will make it more difficult to perceive and hinder the development of the mother's attitude towards newly introduced values, such as the importance of ANC visits during pregnancy. Based on the results of research conducted, it was found that pregnant women who were afraid of the Covid-19 virus did not make regular ANC visits. This irregularity makes pregnancy complications difficult to find and treated late. So pregnant women have many complications in their pregnancy.

The Relationship between Ease of Infrastructure and the Occurrence of Pregnancy Complications During the Covid-19 Pandemic

Facilities and infrastructure are everything (both physical and monetary) that can facilitate and expedite the implementation of a business. Health facilities require facilities and infrastructure to support the success of health services (Pamungkas and Kurniasari, 2020). This infrastructure is very helpful in achieving the goal of reducing health problems. Many health facilities are closed during the Covid-19 pandemic or there are restrictions on visits, causing many problems, especially for the health of pregnant women, in order to prevent complications in their pregnancies.

Based on the results of the analysis of the relationship between the ease of infrastructure and the occurrence of pregnancy complications during the Covid-19 pandemic at the Mlarak health center, analysis was carried out using statistical correlation tests, obtaining a coefficient value of 0.005 ($p < 0.05$), meaning H1 was accepted. H1 is accepted, which means there is a relationship between the ease of infrastructure and the occurrence of pregnancy complications during the Covid-19 pandemic at the Mlarak health center. The Covid-19 pandemic has had a major impact on limiting community activities, including services for pregnant women in health facilities, so that pregnant women cannot easily carry out routine pregnancy visits as an

early detection of complications in pregnancy (Setiowati and Baso, 2021). Apart from that, pregnant women are reluctant to go to community health centers or other health service facilities for fear of infection, there are recommendations to postpone examinations.

Pregnancy and classes for pregnant women, as well as unpreparedness of services in terms of personnel and infrastructure including Personal Protective Equipment (Vianti and Hasanah, 2021). Based on the research results, it was found that many pregnant women did not receive routine services due to the closure of village access or the closure of health services during the Covid-19 pandemic. Limiting the services provided to pregnant women to a certain number of visits by pregnant women means that pregnant women do not make regular visits so that complications that occur in their pregnancies cannot be detected from the start so that many problems or complications arise for pregnant women.

CONCLUSION

The Relationship Between Attitudes and the Occurrence of Pregnancy Complications During the Covid-19 Pandemic

Attitude is the opinion or assessment of people or respondents regarding matters related to health, health, illness and health risk factors. Attitude is a syndrome or collection of symptoms in response to a stimulus or object so that attitude involves thoughts, feelings, attention and other psychological symptoms (Notoatmodjo, 2012). Attitude forms a behavior that will be carried out by a person in the presence of a stimulus. The emergence of the Covid-19 problem has created a fear of infection, especially among vulnerable groups, especially pregnant women. The attitude of pregnant women tends to be fear of this virus. This fearful attitude makes pregnant women reluctant or unwilling to leave the house or have their pregnancy checked. The resulting fear will have a psychological or physiological impact, resulting in problems or complications during pregnancy.

Based on the results of the analysis of the relationship between attitudes and the occurrence of pregnancy complications during the Covid-19 pandemic at the Mlarak health center, analysis was carried out using statistical correlation tests, obtaining a coefficient value of 0.004, which means there is a relationship between attitudes and the occurrence of pregnancy complications during the Covid-19 pandemic at the Mlarak health center.

Of the total sample used of 166 respondents, 92 people were positive for Covid-19. This attitude is in line with the results of ANC visits where pregnant women who have a positive attitude will continue to carry out routine pregnancy checks by paying attention to health protocols. On the other hand, a negative attitude towards Covid-19 will give rise to fear so that most pregnant women who are afraid feel safer when they are at home. This is in accordance with research conducted by Ariestanti (2020) which states that a positive attitude of pregnant women will tend to have positive behavior so that the mother will routinely carry out pregnancy checks even during the Covid-19 pandemic. Apart from that, there is also a supporting role such as family support. has an important role in forming a positive attitude towards Covid-19. Based on research by Aprilia (2018), this positive attitude is in line with pregnant women's knowledge of the complications that will arise.

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