

EDUCATED PREGNANT WOMEN TEND TO MAKE RIGHT DECISION ON CHOOSING HEALTHCARE FACILITY FOR LABOR DURING THE COVID-19 PANDEMIC 2020

Deswani , Rita I. Yuli M

Department of Nursing Health Polytechnic Ministry of Health Jakarta III Jl Arteri JORR jatiwarna -Pondok Melati Bekasi 17415

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**Abstract:** Pregnant women are a group that are susceptible to infection with COVID-19, they have the right to get good quality of care before, during and after giving birth. Anxiety might occur during pregnancy, like confusion about where is giving birth for fear of contracting the Corona virus and PCR examinations that must be done before childbirth. Therefore this study aims to determine the factors associated with the decision to choose the place of delivery for patients during the New Normal COVID-19 period. The research method used a cross sectional design. Respondents of this study were pregnant women who met the inclusion criteria in the area of Puskesmas, Cipayang Village, Lubang Buaya and Pondok Rongon, East Jakarta, August - September 2020. The number of respondents was 112 pregnant women with simple random sampling technique. The instrument used was a questionnaire. The questionnaire was given online using the job form. analysis using univariate analysis, chi square and multivariate linear regression. The results of the analysis show that the mother's education level, employment status and husband's support are proven to influence the mother's decision in choosing a health facility for safe delivery during the COVID-19 pandemic with  $p = \text{value} < 0.005$ . The most dominant factor influencing the mother's decision was the husband's support with  $p\text{-value}: 0.005$ .

**Keywords:** Covid-19, pregnant women and place of delivery

INTRODUCTION

Indonesia is one of the countries affected by the Corona Virus Disease-19 (COVID-19) pandemic with a fluctuating number of confirmed cases of COVID-19 (new cases) (Purnamasari & Raharyani, 2020). COVID-19 was first announced by the World Health Organization (WHO) at the end of 2019 as an infectious disease caused by the Corona Virus (SARS-CoV 2) (Zhong et al., 2020). The majority of COVID-19 was reported to attack the elderly group, however, recently it has also been reported to have attacked Initially all age groups (infants, toddlers, adolescents, productive ages, and groups of pregnant women,

The World Health Organization (WHO) first referred to the coronavirus disease that was first discovered in Wuhan as the 2019 novel coronavirus (2019-nCoV) caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). Indonesia first reported 2 positive cases of COVID-19 on March 2, 2020(1). On April 15, 2020, there were 4,839 confirmed cases, of which the death ratio was 9.5% (459 people), PDPs under treatment were 3,954 people, and 426 recovered patients, 34 provinces have been declared infected with COVID-19, of which there are 5 provinces with cases confirmation of more than 100 people (DKI Jakarta, West Java, East Java, Banten, Central Java, and South Sulawesi), DKI Jakarta is the largest with 2,335 confirmed cases.

The Indonesia Obstetrics and Gynecology Association (POGI Jaya) stated that pregnant women are included in the main risk population in the Covid-19 pandemic. Although virus transmitted from mother to has been no case that says but, hormonal changes in pregnant women make her immune system decrease so it make her easy infected. That's why Dr. Ulul Albab, SpOG, said that pregnant women must immediately consult their obstetrician if they experience flu symptoms or symptoms similar to those of Covid-19. "Ask to be tested for Covid-19." According to Ulul, exposure to the virus found early will allow doctors to recommend the best treatment for the safety of mother and baby. The symptoms of Covid-19 that must be known are fever, cough, and shortness of breath.

Pregnant women are a vulnerable group because pregnancy conditions can cause a partial decrease in immunity due to physiological and psychological changes during pregnancy, resulting in pregnant women being more susceptible to viral infections. Therefore, during the COVID-19 pandemic, it is very possible to cause serious consequences for

pregnant women. Until now, information about COVID-19 in pregnancy is still limited. The collection of data on pregnant women with COVID-19 in Indonesia itself cannot be concluded.

Physiological and immunological changes that occur as a normal component of pregnancy can have systemic effects that increase the risk of obstetric complications from respiratory infections in pregnant women. Through evaluations carried out in previous coronavirus outbreaks (SARS and MERS), pregnant women have been shown to have a high risk of death, spontaneous miscarriage, premature birth, and IUGR (intrauterine growth restriction). The SARS and MERS fatality rates among pregnant patients were 25% and 40%, respectively, with several risks such as premature rupture of membranes, preterm delivery, fetal tachycardia, and fetal distress. However, whether COVID-19 increases the risk of miscarriage and stillbirth is not known.

One of the risks of pregnant women being infected with COVID-19 is during pregnancy check-ups at a midwifery clinic or hospital. So that pregnant women should increase their vigilance by continuing to be disciplined in the use of PPE. Pregnant women can limit visits to obstetric clinics or hospitals by conducting online consultations, actively self-checking for signs and dangers during pregnancy, and only visiting when things are worrisome.

The principles of preventing COVID-19 in pregnant women, postpartum mothers and newborns in the community include universal precaution by always washing hands with soap for 20 seconds or hand sanitizer, using personal protective equipment, maintaining body condition by diligently exercising and getting enough rest. eat a balanced diet, and practice cough-sneezing etiquette. Meanwhile, the principles of management of COVID-19 in health facilities are initial isolation, standard infection prevention procedures, oxygen therapy, avoid excess fluid, empirical antibiotics (considering secondary risks due to bacterial infection), examination of SARS-CoV-2 and examination of co-infections. others, monitoring of the fetus and uterine contractions, early mechanical ventilation in case of progressive respiratory distress, delivery planning based on an individual approach / obstetric indication, and a team-based approach with multidisciplinary.

In an analysis of reports written by 38 pregnant women with COVID-19, with gestational ages varying between 30-40 weeks, 37 of whom were confirmed by PCR, no severe pneumonia or maternal death was found. Among the 30 neonates born, there were no confirmed cases of COVID-19. This lack of female-fetal transmission of COVID-19 is consistent with the experience of pregnant women with other coronavirus infections – SARS and MERS – in the past. There is no definitive data that informs whether pregnancy increases susceptibility to COVID-19.

The World Health Organization (WHO) states that all pregnant women, including those infected or suspected of being infected with COVID-19 have the right to receive good quality care before, during and after delivery. Those who are about to give birth in the midst of the Covid-19 pandemic are entitled to treatment with respect and dignity, to be accompanied during childbirth, to obtain clear information about pregnancy or the delivery process from the doctor or midwife who treats them, to get referrals if needed, and to make choices regarding their pregnancy. , preparation for childbirth during the Covid-19 pandemic is different from childbirth before the arrival of this virus outbreak.

Carrying out a safe delivery in the Covid-19 era is to continue giving birth in health care facilities is the right choice for pregnant women. Come to a health care facility immediately if there are signs of labor. planning a planned referral for pregnant women at risk. If there are indications of planned surgery in pregnant women with under monitoring or confirmed COVID-19, an evaluation is carried out as soon as possible, and if possible postponed to reduce the risk of transmission until the infection is confirmed or the acute condition has resolved. If the operation cannot be postponed, the operation is carried out according to standard procedures with prevention infection according to PPE standard level 3. (Kemkes, 2020).

According to the problems are the backgrounds of this research, so the researcher considers it important to know the factors that are considered by the mother in choosing the place of delivery and see the relationship between the factors behind the mother in choosing the place of delivery and the choice of the place of delivery.

### METHOD

This study used a cross sectional design. The technique select the research site is based on an agreement made between PoltekkesKemenkes Jakarta III and the East Jakarta Health Sub-dept.

The locations of this research are Public Health Center Cipayung, LubangBuaya and Pondok Rangon district. The population target of the study were 112 pregnant women who had antenatal care at the Public Health Center in the period from November 24, 2020 to December 31, 2020.

The Data analysis are used univariate frequency distribution and bivariate chi-square and multivariate stratified linear regression.

## RESULTS AND DISCUSSION

### A. RESULTS

**Table 5.1 Respondents characteristics based on gestational age, education, occupation, Culture, knowledge, family support (n=112) with choice of place of delivery**

Variable	Category	Preference of Delivery		of Place of		OR	P value
		Unsafe	Safe	Unsafe	Safe		
		N	%	N	%		
Age	20 sd 35 years	52	53,1	46	46.9	1.592 (0.498-5.094)	0.310
	> 35 years	9	64.3	5	35.7		
Education	high	42	47.7	46	52.3	4.162 (1.427-12.137)	0.005
	low	19	79.2	5	20.8		
occupation	employee	7	26.9	19	73.1	4.580 (1.735-12.090)	0.001
	Uemployee	54	62.8	32	37.2		
culture	Jawa	57	54.3	48	45.7	0.891 (0.190-4.177)	.0.600
	out of Jawa	4	57.1	2	42.9		
knowledge	high	25	49.0	26	51.0	1.498 (0.708-3.169)	0.193
	low	36	59.0	25	41.0		
family support	supporting	22	40.7	32	59.3	2.986 (1.380-6.459)	0.004
	Unsupporting	39	67.2	19	32,8		
anxiety	anxiety	37	56.9	28	43.1	1.266 (0.596-2.691)	0.336
	unanxiety	24	54,5	23	48.9		

Based on table 5.1, most of the respondents aged between 20-35 years, as many as 98 people (87.5%) only 14 people (12.5%) of respondents aged > 35 years, from 112 respondents it was found that most of the respondents had a secondary higher education level as many as 88 people. (78.6%) and low education level as many as 24 people (21.4%), Most of the respondents as many as 86 people (76.8%) do not work and respondents who work as many as 26 people (23.2%). Based on table 5.1, the dominant cultural background of the respondents is Javanese culture, as many as 105 people (93.8%), only 17 people have cultural backgrounds outside Java. Respondents' knowledge about pregnancy during the COVID-19 pandemic was still low, namely 61 people (54.5%), of which higher education was only 51 people (45.5%). A total of 54 (48.2%) respondents received family support during pregnancy. While the remaining 58 people (52.8%) pregnant women did not get support from their families during pregnancy. Pregnancy during the COVID-19 pandemic caused anxiety in mothers in the face of childbirth, where as many as 65 (58%) pregnant women experienced anxiety and 47 (42%) did not experience anxiety. Based on questions related to the choice of place of delivery, as many as 61 people (54.5%) pregnant women still choose a safe delivery place while 45.5% choose an unsafe place of delivery.

Characteristics of respondents: age, knowledge, cultural background and anxiety have no effect on the mother's decision and choose a safe place of delivery, because from the analysis results obtained  $p > 0.005$ . Characteristics of job respondents showed a  $p$ -value of 0.001 in the bivariate analysis, thus the mother's occupational status was related to the choice of a safe place of delivery. With an OR value of 4,580, which means that mothers who do not work have 4,580 times the possibility of choosing a safe delivery place compared to mothers who work. Husband/exit support during pregnancy affects the mother's choice of a safe delivery place with a  $p$  value of 0.004 with an OR of 2.986, thus mothers who receive support from their husband/family during pregnancy have 2.986 chances to choose a safe delivery place compared to mothers who do not receive support from husband/family during pregnancy.

The independent variables that become candidates for inclusion in the multivariate model are those that meet the requirements. The  $p$  value is less than 0.250. The selection results can be seen in the following table:

**Table 5.2 Result of selection of Candidate Variables Multivariate Final model Variable Of deliveryplace**

no	VariabelIndependen	VariabelDependen	P value
1	Age	delivery place	0.426
2	Education		0.005
3	occupation		0.001
4	Culture		0.883
5	Knowledge		0.290
6	Family support		0.005
7	Worry		0.539

The Variablecandidates which enter to multivariate model are education, accupation and family supporting. All variable are tested by the logistic regression testing. The result shown on the table 5.2.Based on the result it was found that the most influential variable on the preference of place of delivery was family support variable, the relationship could be seen from the OR and  $p$  (Sig) values of 0.005. The strength of the relationship between the variables that have the most influence on the choice of place of delivery is family support of 2,986. Based on the calculation results and the logistic regression equation above, it shows that the variable.

**B. DISCUSSION**

In this study, the group of pregnant women at a young age was more than the group of pregnant women at an older age, but in this study the results of the analysis showed a non-significant relationship between maternal age and the selection of a safe place of delivery. The results of this study contradict the research of Maramis et al., 2013 which resulted in a significant relationship between the age of pregnant women and the choice of place of delivery. This condition may occur because in this study the proportion between young and old age is not proportional. Based on the theory, the younger a person is, the more they absorb new information than the older age group. As a person's age increases, the knowledge he has (Corneles& Losu, 2015). A person's level of acceptance will be easier for someone with higher education than lower secondary education (Corneles& Losu, 2015). Mairusnita, 2007 in (Maramis et al., 2013) says that education is directly proportional to the level of understanding of an information, which means that the higher a person's level of education, the higher the level of one's knowledge and accuracy in attitude and behavior, then education has a big influence. on aspects of thought, attitude, will, and action.

The proportion of respondents who chose a safe place of delivery was greater in mothers with higher education (52.3%) compared to mothers with low education (20.8%). The chi square statistical test shows the results of the analysis with a  $p$  value of 0.005 so it can be concluded that there is a significant relationship between the respondent's education and the choice of place of delivery. Health (home) as a place of delivery compared to mothers with advanced education levels. This is in line with research conducted by VirnaAuliasih, et al (2011) which states that there is a relationship between education level and change. This is in line with research conducted by VirnaAuliasih, et al (2011) which states that there is a relationship between education level and changes in the selection of birth attendants and delivery sites in Bantaeng Regency with a  $p$  value of 0.027. This is also reinforced by research conducted by Rusnawati in 2012 which stated that there was a relationship between the level of education and the choice of place of delivery with a  $p$  value of 0.004.

Mother's knowledge about pregnancy and childbirth during the COVID-19 pandemic did not affect the mother's decision to choose safe health care facilities for childbirth. This is contrary to the research of Jerininekolin (2017) which says that there is a relationship between maternal knowledge about delivery facilities and the use of delivery facilities where the less knowledge of the mother, the mother giving birth does not utilize the delivery facilities. Decision making is based on an understanding of a knowledge. A person with good knowledge will apply his knowledge in his daily life (Aritonang, 2018; Bancin et al., 2020). This is in accordance with research conducted (Purnamasari&Raharyani, 2020) that there is a significant relationship between public knowledge and behavior about COVID-19.

This study shows that there is no significant relationship between respondents' knowledge and the selection of a safe place of delivery. The results of this study contradict the research of Aira Putri (2012) that there is an influence of education or knowledge on the choice of place of delivery with a p value of 0.0003. Likewise, research by Rusnawati (2012) also shows that there is a relationship between knowledge and the choice of place of delivery with a p value of 0.010 and an OR value of 3.41 which means that mothers with high knowledge have 3 times the opportunity to choose a health facility as a place of delivery compared to mothers with high knowledge. with low knowledge. The results are in accordance with the theory of L. Green and Kreuter (1991), that human behavior is formed from predisposing factors (predisposing factors), enabling factors (enabling factors) and reinforcing factors (reinforcing factors).

The anxiety of a pregnant woman during the Covid pandemic in this study showed no effect on the mother's decision to choose a safe delivery facility. The results of this study contradict Bender's (2020) statement that the period of pregnancy, childbirth, and postpartum is a period that spans with psychological disorders in the mother, both during a pandemic or not. In addition to susceptibility to viral transmission, this mental health condition can be exacerbated by a lack of direct family support and social support during pregnancy, childbirth, and the postpartum period. Although the pandemic situation and the implementation of screening for pregnant women are known to affect the mother's mental condition, there are not many reports or literacy that report the relationship in detail (Bender et al., 2020). Anxiety is a feeling of worry, nervousness, or restlessness about something with uncertain results and can accompany, affect, or cause depression (Kajdy et al., 2020). A previous study showed that anxiety is one of the most common negative emotions during pregnancy, especially during the third trimester (Silva et al., 2017).

Employment status of pregnant women shows that there is an influence on the mother's decision to choose safe delivery facilities during the Covid-19 pandemic where the results of the analysis show the p-value is 0.001. This is contrary to the statement (Nursalam, 2012) which says work is not only a source of livelihood for pregnant women. survival but indirectly as a medium for absorbing the latest information from the work environment. This study shows that mothers who do not work tend to choose a safe place of delivery compared to mothers who work outside the home such as laborers, offices, mothers who do not work, have the opportunity to get the latest information and have discussions about this information.

Pregnant and maternity mothers must get great support from their families. Support can be in the form of providing peace of mind, accompanying the mother to consult with health workers, helping with some household chores. Another support that is no less important is to seek information about safe birthing places. Correct information about a safe place of delivery will have a great influence in determining the choice of rescuer and place of delivery.

Psychological support from husband/family provides a feeling of security in undergoing the process of pregnancy and childbirth. health services for delivery assistance compared to those who did not receive family support. However, with the empowerment and independence of a woman and increasing knowledge of a mother in childbirth about the dangers and complications of childbirth, a woman can independently make good decisions for her health, especially in choosing a place of delivery.

Family support (husband) is the attitude, action and acceptance of the family, in this case the husband for the condition of his pregnant wife with all the consequences. A husband's support for his pregnant wife, for example, by accompanying his wife to check her pregnancy, reminding her to be diligent about her pregnancy, and so on. However, the family, in this case the husband is the closest person to pregnant women. Inayah's research result (2018) state that there is no relationship between husband's support and ANC regularity with p: 0.239. Meanwhile, other studies that are in line with this study are the results of Handayani's research which states that there is a



relationship between husband's support and maternal compliance with antenatal care visits with a value of ( $p: 0.005$ )  $r = 0.249$ . According to the researcher's assumption, husband's support during pregnancy provides security and comfort for the mother so that the mother can make the right choice for safe delivery facilities. Besides that, the husband's support also supports the mother to carry out pregnancy checks, assists the mother during antenatal visits so that she can ensure the condition of the wife's pregnancy, the husband's psychological involvement. Husband's understanding of the Covid pandemic that mothers are more susceptible to contracting Covid, so that apart from taking their husbands, they are also expected to always be involved in pregnancy check-ups and remind them to carry out pregnancy checks and use health protocols at the examination site.

## CONCLUSIONS AND SUGGESTIONS

The research was carried out for 1 month, namely October and November 2020 against 112 respondents. Respondents' criteria were mothers who were pregnant in the 2nd and 3rd trimesters in Public Health Center, Cipayang Village, LubangBuaya and PondokRangun, East Jakarta. The respondents criteria's, almost of them are, between 20-35 yearsold, higher education level, Unemployed and with The dominant cultural background are Javanese. Respondents' knowledge about pregnancy during the COVID-19 pandemic was low and they received family support during pregnancy half of the respondents. While the remaining 58 people (52.8%) pregnant women did not get support from their families during pregnancy. Pregnancy during the COVID-19 pandemic caused anxiety in mothers in the face of childbirth, where as many as 65 (58%) pregnant women experienced anxiety. Based on questions related to the choice of place of delivery, as many as 61 people (54.5%) pregnant women still choose a safe place of delivery while 45.5% choose an unsafe place of delivery. Education level and employment status as well as the husband's support from respondents affect the mother's decision in choosing a safe place of delivery. The most influential factor is the support from the husband,

The results of this study suggest that it can be used as a source of information for health institutions in order to further improve their services in each part of the institution, periodically refresh health workers and cadres to improve health services, especially for mothers with low education, working mothers and mothers and those who do not get husband's support. It is hoped that health workers can assist and motivate in choosing a safe place of delivery, especially during the COVID-19 pandemic. This research needs to be continued with qualitative research on the constraints or problems that affect it so that more in-depth information can be obtained about the factors related to the selection. birthing place.

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