

RELATIONSHIP BETWEEN AGE AND PARITY OF MOTHER WITH PRE-ECLAMPSIA OCCURRENCE IN PREGNANT WOMEN IN THE WORK AREA OF THE PUSKESMAS MANGASA, MAKASSAR CITY

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ABSTRACT

Preeclampsia is the onset of hypertension with proteinuria due to pregnancy, after 20 weeks' gestation or immediately after delivery. These symptoms can occur before 20 weeks if trophoblastic disease occurs. This study aims to determine the relationship between age and maternal parity with the incidence of pre-eclampsia in pregnant women in the work area of the Puskesmas Mangasa, Makassar City. The research design used in this study was descriptive analytic research with a cross sectional study design. Conducted from July to October 2018, with a sample of 70 respondents. In this study showed that there was no relationship between the age of pregnant women and the incidence of preeclampsia with a value of $p(1.00) > 0.05$ and there was no relationship between parity and the incidence of preeclampsia with a value of $p(1.00) > 0.05$. It is recommended for health workers to be intensive in detecting the presence of preeclampsia in pregnant women and counseling about the importance of routine antenatal care to as early as possible be aware of the risk of the occurrence of preeclampsia-eclampsia in pregnancy and for further researchers, further research is needed to find factors related to the incidence of preeclampsia so that the results are in accordance with the theory, such as parity, hypertension history and Antenatal Care examination.

Keywords: Age, Parity, Pregnant Women, Pre-eclampsia

INTRODUCTION

Preeclampsia is the onset of hypertension with proteinuria due to pregnancy, after 20 weeks' gestation or immediately after delivery. These symptoms can occur before 20 weeks if trophoblastic disease occurs. (Sudhaberta, 2001). Preeclampsia can occur in about 3% to 5% of pregnancies and is one of the main causes of morbidity and mortality of pregnant women (Senden., 2011). The emergence of preeclampsia, according to (Dachlan., 2008), is caused by multifactors. Age over 35 years and obesity are predisposing factors for the occurrence of preeclampsia (Trijatmo, 2007).

According to the World Health Organization (WHO) estimates maternal mortality in the Southeast Asia region is around 170 per year and as many as 98% of all maternal deaths in developing countries are referred to Indonesia (Anonim, 2016).

According to the Indonesian Health Demographic survey in 2003 maternal mortality rates ranged from 307 per 100,000 live births in 2005 the maternal mortality rate was still around 290.8 per 100,000 live births with several causative factors namely 40-50% bleeding, Pre-eclampsia and eclampsia 20- 30%, Birthway infections 20-30%. (Anonymous, 2016)

According to data from the Central Statistics Agency (BPS) in 2016 noted that the infant mortality rate (IMR) reached 25.5.

That is, there are around 25.5 deaths per 1,000 babies born. Over the past few years, Indonesia's IMR has gradually declined. In fact, the development of IMR in Indonesia was quite encouraging in 20 years showing a decline. Because, in 1991 AKB had reached 68. However, the IMR in Indonesia is still high compared to neighboring countries such as Malaysia and Singapore which have been under 10 deaths per 1,000 births.

Based on data from the South Sulawesi Provincial Health Office, the Maternal Mortality Rate (MMR) in 2009 caused by mild preeclampsia was 31 people. (Profile of the South Sulawesi Provincial Health Office 2009, accessed February 1, 2018). The results of collecting data / indicators on the performance of MSS in the health sector through the district / city health profile in 2008 also showed that the percentage of high risk pregnant women who were referred to and received further health services was 77% (SPM target 80%).

Based on several facts and the results of the above research, the researchers are interested in conducting research with the title "Relationship between age and maternal parity with the incidence of pre-eclampsia in pregnant women in the work area of the Puskesmas Mangasa Kota Makassar".

RESEARCH METHODS

The type of research used in this study is descriptive analytic research with a cross sectional study design, to determine the relationship of age and parity factors of pregnant women with the incidence of preeclampsia in pregnant women in the work area of Puskesmas Mangasa, Makassar.

The population in this study were all pregnant women who were in the work area of the Puskesmas Mangasa Kota Makassar.

While the sample of this study was 70 respondents which were the total population of pregnant women who were in the work area of the Puskesmas Mangasa Kota Makassar at the time of the study and fulfilled the research inclusion criteria.

This research was conducted at the Puskesmas Mangasa Kota Makassar in May - October 2018 is a government-owned Puskesmas.

RESEARCH RESULT

This research took place from May to October 2018 in the working area of the Puskesmas Mangasa in Makassar with a sample of 70 people. After the data is collected, then the data is processed and analyzed by Univariate and Bivariate, the research conducted is presented as follows:

1. Characteristics of Respondents

Table 1.
General Characteristics of Respondents at the Mangasa City Makassar Health Center 2018

Characteristics of Respondents	f	%
Age (Years)		
<20	9	12,8
20-35	53	75,8
>35	8	11,4
Education		
Higher education	13	18,5
Senior secondary	36	51,5
Junior secondary	18	25,8
Primary	3	4,2
Occupation		
Government employees	2	2,8
General employees	5	7,2
Houswives	63	90

Total	70	100
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Based on table 1. above shows that of 70 respondents, most of the respondents were in the age range of 20-35 years as many as 53 respondents (75.8%), and a small proportion in the age range > 35 years were 8 respondents (11.4%) Then at the education level most of the respondents were at the high school graduation level as many as 36 respondents (51.5%) and a small number finished elementary school as many as 3 respondents (4.2%). Furthermore, respondents who were housewives were 63 respondents (90%) and respondents were PNS as many as 2 respondents (2.8%).

2. Univariate Analysis

Univariate analysis in this study aims to look at the frequency distribution of the independent variables, namely the age factor of pregnant women, parity of pregnant women and the dependent variable namely the risk of preeclampsia in pregnant women in the work area of the Puskesmas Mangasa, Makassar

a. Age of respondent

Table 2.
Distribution of Frequency of Respondents by Age Pregnant Women at Puskesmas Mangasa Makassar City 2018

Age	f	%
Low risk (20-35 years)	53	75,8
High risk : (<20 dan >35 years)	17	24,2
Total	70	100

Based on Table 2. above it can be seen that among 70 respondents most of the respondents were in the age range of 20-35 years (low risk) as many as 53 respondents (75.8%), a small percentage of respondents in the age range <20 and > 35 years (High risk) 17 respondents (24.2%).

b. Parity of pregnant women

Table 3
Respondent Frequency Distribution Based on Parity at the Puskesmas Mangasa Makassar City 2018

Parity	f	%
Primipara	39	55,7
Multipara	31	44,3
Total	70	100

Based on table 3. above it can be seen that among 70 respondents, there were 39 respondents (55.7%) who were Primipara (first born alive) and the rest were respondents who were Multipara (more than one born alive) as many as 31 respondents (44.3%) .

c. Risk of Preeclampsia

Table 4.

Respondents' Frequency Distribution Based on the Risk of Preeclampsia at the

3. Bivariate Analysis

3.1 Relationship between Age of Pregnant Women and Preeclampsia at Mangasa Health Center Makassar City 2018

Table 5
Distribution of Relationships between Age of Pregnant Women and Preeclampsia at Mangasa Makassar Health Center 2018

Age	Preeclampsia				Total		p
	Yes		No		f	%	
	f	%	f	%			
Low risk (20-35 years)	3	5,7	50	94,3	53	75,7	1,00
High risk (<20 or >35 years)	0	0	17	100	17	24,3	
Total	3	4,3	67	95,7	70	100	

Based on table 5. above, it can be seen that among 70 respondents, the low risk age range (20-35 years) that is not at risk of Preeclampsia is 50 respondents (94.3%) and 3 respondents (5.7%) are at risk of Preeclampsia. And the high risk age range (<20 and> 35 years) which is not at risk of Preeclampsia is 17 respondents (100%) and 0 respondents (0%) who are at risk of Preeclampsia.

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Risk of preeclampsia	f	%
No (Normal BP)	67	95,7
Yes (BP \geq 140/90 mmHg)	3	4,3
Total	70	100

Based on table 4. above it can be seen that among 70 respondents, there were 67 respondents (95.7%) who were not at risk of preeclampsia (if normal blood pressure) and the rest were respondents who were at risk of preeclampsia (if blood pressure 140/90 mmHg) were 3 respondents (4.3%)

To assess the relationship between the age of pregnant women and the incidence of preeclampsia in the work area of the Puskesmas Mangasa city of Makassar, bivariate analysis was performed using Chi-square statistical tests, with a significance level of 5% (α : 0.05). The results showed that the value of p (1.00) > 0.05 means that there was no relationship between the age of pregnant women and the incidence of preeclampsia.

1.2 The Relationship between Parity and Preeclampsia at Mangasa Makassar Health Center

Table 6
Distribution of the Relationship between Parity and Preeclampsia
at Mangasa Health Center Makassar City 2018

Parity	Preeclampsia				Total		<i>p</i>
	Yes		No		f	%	
	f	%	f	%			
Primipara	2	5,1	37	94,9	39	55,7	1,00
Multipara	1	3,2	30	96,8	31	44,3	
Total	3	4,3	67	95,7	70	100	

Based on table 6. above, it can be seen that among 70 respondents, Parity with Primipara which is not at risk of Preeclampsia was 37 respondents (94.9%) and 2 respondents (5.1%) who were at risk of Preeclampsia. And Parity with Multipara which is not at risk of Preeclampsia is 30 respondents (96.8%) and 1 respondent (3.2%) who are at risk of Preeclampsia.

To assess the relationship between parity and the incidence of preeclampsia in the work area of the Puskesmas Mangasa city of Makassar, bivariate analysis was performed using Chi-square statistical tests, with a significance level of 5% (α : 0.05). The results showed that the value of p ($1.00 > 0.05$) means that there is no relationship between parity and the incidence of preeclampsia.

DISCUSSION

1. Relationship between the age of pregnant women and the incidence of preeclampsia

The results of the analysis of the relationship between the age of pregnant women and the incidence of preeclampsia in the low risk age range (20-35 years) that are not at risk of preeclampsia were 50 respondents (94.3%) and 3 respondents (5.7%) who were at risk of preeclampsia. And the high risk age range (<20 and > 35 years) which is not at risk of Preeclampsia is 17 respondents (100%) and 0 respondents (0%) who are at risk of Preeclampsia.

The results of the statistical test of the study obtained p value ($1.00 > 0.05$), which means that there was no significant relationship between the age of pregnant women and the incidence of preeclampsia

at the Puskesmas Mangasa, Makassar City.

The age of a mother is related to reproductive organs. The age of healthy and safe reproduction is aged 20-35 years. According to the researchers, the incidence of preeclampsia was found in the age of 20 - 35 as many as 3 respondents, therefore it is very important to provide information to the public, especially girls and women to plan their pregnancies at the age of 20-35 years to avoid complications such as preeclampsia, diabetes gestational and others.

According to Wahyudi (2000) the best time for a woman to get pregnant is that at the age of 20-35 years, the egg cell has been produced from birth but ovulation only occurs during puberty. The egg cell that managed to get out only one month, this indicates an element of selection that occurs so that it is assumed that the egg cell that succeeded in coming out was the superior egg cell. Because the older the quality of the egg is reduced, the lower the quality of the offspring it produces, while the age below 20 years is not a good time to get pregnant because the reproductive organs are not perfect which will complicate the process of pregnancy and childbirth.

Although in this study the age of the high risk range (<20 and > 35 years) was not at risk of preeclampsia 17 respondents and those at risk of preeclampsia did not exist because most pregnant women were housewives (90%). Housewives tend to have a flexible time to care for their pregnancy and do antenatal care. Some maternal education has a secondary education level (51.5%). Pregnant women with secondary education have a level of understanding and ease in obtaining information.

Antenatal care is an effort that can be done as a prevention of preeclampsia or eclampsia. For officers, especially midwives, to more closely carry out the examination, identify it early and periodically and collaborate with doctors to prevent the onset of preeclampsia. Pregnancy monitoring at least 4 times during pregnancy can be used as a basis for implementing antenatal care. Visits at least once in Trimester I, once in Trimester II and twice in Trimester III. For this reason, it is recommended that health workers increase antenatal care and counseling activities for pregnant women regarding antenatal care, provide advice, and counsel the community to detect early complications in pregnancy such as hypertension and preeclampsia that may be faced by pregnant women during their pregnancy, maternity and postpartum period.

Supported by the existence of maximum ANC services and counseling conducted by midwives at the Puskesmas Mangasa, Makassar, every visit during pregnancy checks for pregnant women to maintain health and maintain a diet during pregnancy so that the risk of complications or complications that will occur during birth can be prevented for example the incidence of preeclampsia.

Based on the results of the research the researchers got, the researchers concluded that the age of pregnant women was not related to the incidence of preeclampsia at the Puskesmas Mangasa Kota Makassar. Because in this study the statistic test results obtained p value $(1.00) > 0.05$.

2. The relationship between parity and the incidence of preeclampsia

The results of the analysis of the relationship between parity and the incidence of preeclampsia were found that there were 37 respondents (94.9%) who were primipara who were not at risk of preeclampsia and 2 respondents (5.1%) who were at risk of preeclampsia. While multiparas as many as 30 respondents (96.8%) were not at risk of preeclampsia and 1 respondent (3.2%) were at risk of preeclampsia.

The results of the research statistical test obtained p value $(1.00) > 0.05$, which means that there is no significant relationship between parity and the incidence of

preeclampsia at the Puskesmas Mangasa Kota Makassar

The above is supported by different perceptions and assumptions regarding the relationship between parity and the incidence of preeclampsia, where most pregnant women who come to the KIA health center Mangasa Makassar City perceive that the first babies they have born have nothing to do with the incidence of preeclampsia, for them as long as they have the ability to give birth again, they will try not to always be anxious about their fetus and always believe that as long as they maintain their health and consume food that does not cause an increase in blood pressure during pregnancy, it is hoped that the fetus will remain healthy. with the occurrence of preeclampsia. In addition there are factors that affect parity, namely education, employment, economic conditions, cultural background and knowledge.

Supported by the existence of maximum ANC services and counseling conducted by midwives at the Puskesmas Mangasa, Makassar, every visit during pregnancy checks for pregnant women to maintain health and maintain a diet during pregnancy so that the risk of complications or complications that will occur during birth can be prevented for example the incidence of preeclampsia.

The results of this study are also consistent with the study of Tigor H. Situmorang, et al (2016), namely that there was no significant relationship between parity and the incidence of preeclampsia in the KIA Police Anutapura Hospital Palu, as well as the results of Erni W and Sulastri (2007) in Tigor H. Situmorang, et al (2016), namely that the variable parity does not have a significant effect on the incidence of preeclampsia. So the alternative hypothesis which states that there is an influence between parity preeclampsia in Dr.Moewardi Hospital Surakarta does not prove the truth.

Based on the results of the research that the researchers got, the researchers concluded that Parity was not related to the incidence of preeclampsia at the Puskesmas Mangasa, Makassar City. Because in this study the statistic test results obtained p value $(1.00) > 0.05$.

CONCLUSION

The conclusion of the study is that the age of pregnant women is not related to the incidence of preeclampsia at the Puskesmas Mangasa Kota Makassar with a p value $(1.00) > 0.05$ and Parity is not related to the incidence of preeclampsia at the Puskesmas Mangasa Kota Makassar with a p value $(1.00) > 0.05$.

SUGGESTION

For health workers to be intensive in detecting preeclampsia in pregnant women and IEC about the importance of routine antenatal care to as early as possible be aware of the risk of the occurrence of preeclampsia in pregnancy. As well as for further researchers, further research is needed to find out factors that are related to the incidence of preeclampsia so that the results are in accordance with the theory, such as parity, history of hypertension and Antenatal Care (ANC).

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