THE CORRELATION BETWEEN EMPLOYMENT STATUS AND PARITY WITH PREECLAMPSIA

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ABSTRACT

Preeclampsia is a collection of symptoms that occur in pregnant women, during childbirth, and in the puerperium consisting of hypertension, and proteinuria. This study aims to analyze the relationship between employment status and parity with the incidence of pre-eclampsia in pregnant women. The population was all mothers who gave birth with pre-eclampsia/eclampsia at RSUD Dr. R Koesma Tuban in October – December 2020 a total of 43 mothers gave birth. The sampling using Total Sampling. The independent variables in this study were employment status with each nominal data scale and parity with ordinal data scale and the dependent variable in this study was preeclampsia with an ordinal data scale. Data analysis in this study used Spearman with the help of SPSS. Significant limitation if p-value < 0.05. The analysis using the Spearman obtained p-value = 0,057 because the p-value > 0.05 which indicates there is a weak correlation between employment status and pre eclamsia of pregnant women. The analysis using the Spearman statistical test obtained p-value = 0,811 because the p-value > 0.05 which indicates there is no correlation between parity and pre eclamsia of pregnant women.

Keywords *: Pre-eclamsia, parity, employment status*

Received : April 28, 2021 Received in revised form : May 29, 2021 Accepted : June 21, 2021

INTRODUCTION

Pregnancy must be monitored intensively so that there are no deviations because every pregnancy has a risk of death. In the world, every minute a woman dies from complications related to pregnancy and childbirth. In other words, 1400 women die every day or more than 500,000 women die every year due to pregnancy and childbirth. Preeclampsia is the second leading cause of death in pregnancy in the world. Death generally occurs due to delays in handling and maternal ignorance about preeclampsia. Preeclampsia is a collection of symptoms that occur in pregnant women, during childbirth, and in the puerperium consisting of hypertension, and proteinuria.[1]

In developing countries, the incidence of preeclampsia ranges from 5-

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6% and eclampsia 0.1-0.7%. WHO reports that the incidence of preeclampsia and eclampsia in the world is still quite high. The incidence of preeclampsia is 861 of 96,494 pregnant women and eclampsia is 862 of 96,497 pregnant women. Indonesia has an incidence of preeclampsia around 7-10% of all pregnancies. The incidence of preeclampsia and eclampsia ranks second out of all cases that afflict pregnant women.[2]

According to data from the World Health Organization (WHO), overall, preeclampsia and eclampsia account for approximately 14% of maternal deaths per year, which is around 50,000-75,000 deaths. Preeclampsia is a disease that can cause 17.6% of maternal deaths.[3]

The maternal mortality rate in Indonesia is still high in the ASEAN (Association of southeast Asian Nations) region. The results of 2012 Indonesian Demographic and Health Survey (IDHS) show that in 2012 the maternal mortality rate reached 359 per 100,000 live births, an increase of about 57% compared to the condition in 2007 which was only 228 per 100,000 live births. The target for achieving the target in 2015 is 102/100,000 birth rates.[5]

Maternal Mortality Rate (MMR) is one of the important indicators in determining the degree of public health. Maternal Mortality Rate (MMR) can also be used in monitoring deaths related to pregnancy, childbirth, and the puerperium. Maternal mortality cases in East Java in 2013 showed an increase compared to 2012 from 598 cases to 642 deaths.The maternal mortality rate in Tuban district in 2016 was still quite high, namely 66/100,000 live births, and the visit of pregnant women during K1 was quite high as much as 98% in K4 which decreased by 93.15%.[5]

Based on data obtained from the Tuban District Health Office (2016). Merakurak village has 56,285 inhabitants, with a total of 16,262 households. Of the total population who are married, there are 503 pregnant women, while the estimated pregnant women with complications are 101 pregnant women and only 81 pregnant women, or 80.5% have received treatment for complications.[5]

Preeclampsia is an increase in blood pressure of 140/90 mmHg (mild preeclampsia), 160/110 mmHg (severe preeclampsia) that only arises after 20 weeks of gestation, accompanied by rapid maternal weight gain due to the body

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swells, and on laboratory examination protein is found. in the urine (proteinuria).[6]

The cause of preeclampsia is currently not known with certainty. The well-known theory as the cause of preeclampsia is placental ischemia, but this theory cannot explain everything related to the disease. Not only one factor, but many factors that cause preeclampsia and eclampsia (multiple causations). Factors that are often found as risk factors include primigravida, especially those aged < 17 years or > 35 years, family history of preeclampsia, multiple pregnancies, hydatidiform mole, diseases that accompany pregnancy such as diabetes mellitus and obesity (obesity). However, among the factors found, it is often difficult to determine which is the cause and which is the effect.[6]

Various efforts have been made by the government to reduce the number of preeclampsia by providing counseling as much as possible in improving the health of mothers and babies. The government's efforts include using the MCH handbook, the P4K program (planning, implementing, and preventing childbirth complications), providing PONEK and PONED. In addition, another breakthrough effort is the Jampersal (birth insurance) which has been rolled out since 2011 where this Jampersal is intended for all pregnant, maternity, and postpartum women.[5]

Ability to recognize and treat mild preeclampsia so that it does not progress to severe preeclampsia and prevent severe preeclampsia from becoming eclampsia. This can only be known if the pregnant woman checks herself during pregnancy, including measuring blood pressure at any time and giving vitamins and minerals. Regular and quality antenatal examinations as well as careful about signs as early as possible (mild preeclampsia), and given adequate treatment so that the disease does not become more severe. There is always vigilance for the possibility of preeclampsia. Provide information about the benefits of rest and sleep tranquility, and the importance of regulating a diet low in salt, fat, carbohydrates, and high protein, as well as maintaining excessive weight gain.[6] This study aims to analyze the relationship between employment status and parity with the incidence of pre-eclampsia in pregnant women.

MATERIALS AND METHODS

The was an analytic study with a cross-sectional approach. In this study, the population was all mothers who gave

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birth with pre-eclampsia/eclampsia at RSUD Dr. R Koesma Tuban in October – December 2020 a total of 43 mothers gave birth. The sampling using Total Sampling.[7]

In this study, the authors used secondary data, namely the medical record data source in the maternity ward of Dr. RSUD. R Koesma Tuban for variables. The independent variables in this study were employment status with each nominal data scale and parity with ordinal data scale and the dependent variable in this study was preeclampsia with an ordinal data scale. Data analysis in this study used *Spearman* with the help of SPSS. Significant limitation if p-value < 0.05.[8]

RESULT

Almost all pregnant women experience pre-eclampsia/eclampsia as many as 33 (76.7%)

Table 1. Distribution of Frequency Based on Occupational Status in Maternal Maternity with the Incidence of Pre-eclampsia/Eclampsia at RSUD Dr. R Koesma Tuban in October-December 2020

No	Employment Status	Frequency (f)	Percentage (%)
1	Working	33	76,7%
2	Not Working	10	23,3%
	Total	43	100

Source: Secondary Data, 2020

Table 2. Distribution of Frequency Based on Parity in Maternal Maternity with the Incidence of Pre-eclampsia/Eclampsia at RSUD Dr. R Koesma Tuban in October-December 2020

No	Parity	Frequency (f)	Percentage (%)
1	Primipara	17	39,5%
2	Multipara	26	60,5%
3	Grande multipara	0	0%
	Jumlah	43	100

Source: Secondary Data, 2020

Based on table 2, most of the mothers who gave birth experienced pre-eclampsia/eclampsia, namely in mothers with multipara as many as 26 (60.5%).

Almost some of the mothers who gave birth experienced mild pre-eclampsia as many as 21 (48.8%).

Table 3. Frequency Distribution Based on the Classification of Pre-eclampsia/Eclampsia in Maternal Maternity with the Incidence of Pre-eclampsia/Eclampsia in Dr. R Koesma Tuban in October-December 2020

No	Pre-eclampsia/ Eclampsia	Frequency (f)	Percentage (%)
1	Mild Pre-eclamsia	21	48,8%
2	Severe Pre-eclamsia	16	37,2%
3	Eclamsia	6	14%
	Total	43	100

Sumber : Secondary Data, 2020

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Table 4. Analysis of the correlation between Pre-Eclampsia / Eclampsia and Employment Status

Pre-Eclampsia / Eclampsia	Employment Status			
	Working	%	Not Working	%
Mild Pre-eclamsia	19	44,2	2	4,7
Severe Pre-eclamsia	10	23,3	6	14,0
Eclamsia	4	9,3	2	4,7
Total	33	76,7	10	23,3
p=0,057				

The analysis using the *Spearman* obtained p-value = 0,057 because the p-value > 0.05 which indicates there is a weak correlation between employment status and pre eclamsia of pregnant women.

Table 5. Analysis of the correlation between parity and pre eclamsia of pregnant women

Pre-Eclampsi/ Eclampsia	Parity			
	Primipara	%	Multipara	%
Mild Pre-eclamsia	8	18,6	13	30,2
Severe Pre-eclamsia	8	18,6	8	18,6
Eclamsia	2	4,7	4	9,3
Total	18	41,9	25	58,1
p=0,811				

The analysis using the *Spearman* statistical test obtained p-value = 0,811 because the p-value > 0.05 which indicates there is no correlation between parity and pre eclamsia of pregnant women.

DISCUSSION

Mild pre-eclampsia is the onset of hypertension accompanied by proteinuria and edema after 20 weeks of gestation or immediately after delivery. Mild pre-eclampsia when accompanied by a blood pressure of 140/90 mmHg, general edema, feet, fingers, hands, and quantitative proteinuria of 0.3 grams or more per liter: qualitative 1+ or 2+ on crowdfunding.[9]

Based on the literature and research results that researchers found, most of the pregnant women experienced mild pre-eclampsia. This can be strengthened by the theory, that mild pre-eclampsia is caused by an increase in the frequency of primigravida, multiple pregnancies, hydramnios, and molahidatidosa, increasing frequency with advancing gestation.[6,9]

Parity is the condition of a mother who gives birth to more than one fetus. Sucheilitif parity is the status of a woman about the number of children she has ever given birth to. parity is a woman who has given birth and is divided into several

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terms: Primipara is a woman who has given birth to a fetus for the first time, Multipara is a woman who has given birth to a fetus more than once, Grande multipara is a woman who has given birth to a fetus more than five times.[10]

Maternal work factors can affect the risk of pre-eclampsia/eclampsia. Women who work outside the home have a higher risk of developing preeclampsia compared to housewives. Work is associated with physical activity and stress which are risk factors for pre-eclampsia. Work is associated with physical activity and stress which are risk factors for pre-eclampsia. However, the group of mothers who do not work with low-income levels will cause the frequency of ANC to decrease in addition to low incomes causing low nutritional quality. Jobs are divided into two, namely: Working as farmers, laborers, private sector, self-employed, and civil servants and Not working like domestic workers. As midwives, of course, we must be able to detect from the beginning the occurrence of pre-eclampsia/eclampsia so that there are no more severe problems that can be fatal to maternity mothers.[11-12]

CONCLUSION

There was a weak correlation between employment status and pre eclamsia of pregnant women and There was no correlation between parity and pre eclamsia of pregnant women. It is hoped that health workers, especially midwives, should be able to detect pregnancy complications early, especially in providing interventions related to pre-eclampsia problems. The results of this study are expected to add information material in the library to gain knowledge and insight about pregnancy complications, especially in pre-eclampsia.

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