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THE RELATIONSHIP OF LABOR MOTHER AGE AND PARITY WITH PREECLAMSIA IN PRATAMA MARTUA SUDARLIS CLINIC MEDAN 2023

Nurmalina Hutahaean[1], Merrygrace Simanjuntak[2], Siti Nurmawan Sinaga[3]
[1-2]STIKes Mitra Husada Medan
Email:(nurmalinaamd@gmail.com)

(ABSTRACT)

Preeclampsia is a disease that arises with signs of hypertension, edema, and urine protein arising from pregnancy and childbirth. Labor with preeclampsia is one of the most critical issues in midwifery care. In Indonesia 30% of maternal deaths are due to hypertension in pregnancy and in North Sumatra 9 the number of maternal mortality is always a danger caused bypreeclampsia.The purpose of this study was to determine whether there is a relationship between maternal age and parity with preeclampsia in Clinic Pratama Martua Sudarlis Medan in 2023. This research is an analytical survey with cross sectional method approach. Sampling technique using secunder data of 30 mothers who experienced preeclampsia from January to July 2023 at Clinic Pratama Martua Sudarlis Medan in 2023. The results of research on 30 mothers with pre-eclampsia based on age 20-35 years majority did not risk as much as 22 people (73,3%). Based on primipara parity majority do not risk as many as 18 people (60,9%). Based on severe preeclampsia the majority of 15 people (50.0%). The result of bivariate study showed that there was a correlation between age and pre-eclampsia with p-value (p-0,001) and there was a parity relationship with pre-eclampsia with p-value (p-0,003).These results conclude that age and parity of maternal mothers are associated with preeclampsia In Pratama Martua Sudarlis Medan Tahun 2023. It is expected that health workers, especially to Pratama Martua Sudarlis Medan Clinic in order to provide complete information about the dangers of preeclampsia, and health workers are expected to improve maternal midwifery care about preeclampsia.

Keywords: Mother Age, Parity, Preelamsia

INTRODUCTION

B Preeclampsia is a disease that presents with signs of hypertension, edema, and protein in the urine caused by pregnancy and childbirth. Maternal Mortality Rate (MMR) is an indicator to see women's health status. MMR is one of the targets that has been determined in the Millennium Development Goals, namely goal 5, improving maternal health where the target

to be achieved by 2015 is to reduce up to ¾ the risk of maternal mortality established by the United Nations (UN) in 2000. This includes the UN Secretary-General's Global Strategy for Women and Children's Health. Now, building on the momentum generated by MDG 5, the Sustainable Development Goals (SDGs) establish a transformative new agenda for maternal health to end preventable maternal deaths; of SDG 3 is to reduce the global MMR to less than 70 per 100 000 live births by 2030. According to WHO in 2015 the maternal mortality rate in the world was as many as 303,000 mothers, namely 216/100,000. Most of these complications develop during pregnancy. The main complications contributing to 80% of maternal deaths are severe bleeding (mostly postpartum hemorrhage), infection (usually after delivery), high blood pressure during pregnancy (pre-eclampsia and eclampsia) and unsafe abortion. The rest are caused by malaria and AIDS during pregnancy. Based on research by WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division Maternal Mortality Estimation Inter-Agency Group, the number of MMR in Indonesia in 2005 was 212/100,000 live births, in 2010 there were 165/100,000 live births and in 2015 there are 126/100,000 live births. Even though this figure has almost reached the 5th MDGs target, namely 102/100,000 live births, it is still far from the target of SDG 3 which is to reduce the global MMR to less than 70 per 100,000 live births by 2030. Based on the results of the Indonesian Demographic Health Survey, during the period 1991-2007 the MMR decreased from 390 to 228/100,000 live births, but in the 2012 IDHS the MMR rose again to359/100,000 live births. This figure is still quite high when compared to

neighboring countries in the ASEAN Region. The main triad of maternal mortality is bleeding, hypertension in pregnancy (HDK) and infection. Indonesia Health Profile In 2014, almost 30% of maternal deaths in Indonesia were caused by HDK. Hypertension in pregnancy (HDK) is defined as blood pressure ≥140/90 mmHg caused by pregnancy itself, which has the potential to cause serious interference in pregnancy. Based on the International Society for the Study of Hypertension in Pregnancy (ISSHP) there are 4 categories of HDK, namely preeclampsia-eclampsia, gestational hypertension, chronic hypertension and chronic hypertension superimpose preeclampsia. The basic concept of managing some of these HDKs is the same, namely by breaking the regional uteroplacental ischemia chain so that the symptoms of HDK can be reduced.

Preeclampsia must be detected and managed appropriately before the onset of seizures (eclampsia) or even death and other life-threatening complications. Administering drugs such as magnesium sulfate for pre-eclampsia can reduce a woman's risk of developing eclampsia.

Decreased blood flow to the placenta results in impaired placental function. This results in hypovolemia, vasospasm, decreased uteroplacental perfusion and damage to the endothelial cells of the placental blood vessels so that fetal mortality increases. placental abruption and death. Preeclampsia can be influenced by several factors (multiple causes). Maternal age (<20 or ≥35 years), primigravida, nulliparity and increased BMI are predisposing factors for the occurrence of hypertension in pregnancy. Age 20-30 years is the safest period for pregnancy / childbirth. Women who are at the beginning or end of reproductive age are considered vulnerable to experiencing pregnancy complications. Two years after the first menstrual period, a woman may still

achieve between 2-7% growth in her pelvis and 1% in height. The impact of less age can cause complications during pregnancy.

Every primigravida adolescent has a greater risk of experiencing HDK. Several factors related to preeclampsia are age that is too young or too old at the time of delivery, high parity, mother's education, antenatal care, interval between pregnancies that are less than 2 years, primigravida, hydramnios, multiple pregnancies, moleshydatidiform, diabetes mellitus and obesity.

Preeclampsia is ten times more common in primigravidas, multiple pregnancies have twice the risk, obese women with a body mass index > 29 increase the risk of preeclampsia fourfold and mothers who have a history of preeclampsia have a 20% increased risk of having a recurrence. Based on the Health Profile of North Sumatra in 2015, the number of maternal deaths was 249 per 100 thousand births. While the 2015 MDGs target for MMR was 102 per 100 thousand births, out of 313,724 pregnant women in North Sumatra, only 266,109 pregnant women had their womb checked four times or 84.8 percent and 258,175 who underwent childbirth (86.2 percent). "Maternal deaths occur during pregnancy, during childbirth or during childbirth," and one of the factors causing these deaths is the preeclampsia factor. The highest number of cases of maternal death occurred in Labusel Regency (17 cases) with 6,548 pregnant women, the number live births 6,125 and Labura District (17 maternal deaths) with 8,541 pregnant women, 6,755 live births. Then followed by Labuhan Batu District 16 cases, 9,763 pregnant women, 8,318 live births. Asahan 15 cases with 15,584 pregnant women, 13,579 births life. Medan 53,933 pregnant women, 9 the number of maternal deaths. The research was conducted by Mardiani

Novita Rahayuti with the title factors related to the occurrence of preeclampsia in third trimester pregnant women at the Pasar Rebo District Health Center. The research method was cross-sectional with consecutive sampling and a total sample of 106 respondents. The results of the Chi-square test showed that there was a significant relationship between age (p=0.000, OR=25.675 95% CI:7.001-94.160), parity (p=0.009, OR=4.476 95% CI:1.518-13.196), occupation (p=0.000, OR=62.125 95%CI:12.872-299.849), education (p=0.000, OR=24.267 CI:7.076-83.220), knowledge of the occurrence of preeclampsia (p=0.013, OR 3.683 CI:1.394-9.728), and history of maternal disease (p=0.004, OR=4.568 CI: 1.709-12.211) with the occurrence of preeclampsia. Health workers can further increase efforts to prevent preeclampsia so that the maternal mortality rate caused by preeclampsia can be reduced. Based on an initial survey conducted by researchers at the Pratama Martua Sudarlis Medan Clinic, namely 30 mothers who gave birth and of those who gave birth there were always mothers who experienced preeclampsia. The data taken was from January to July 2022. Based on the background description of the problem above , it is known that the incidence of preeclampsia can lead to high MMR and there are known to be many risk factors, so the authors are interested in taking the title "relationship between age and maternal parity with preeclampsia at the Pratama Martua Sudarlis Clinic Medan in 2023".

MATERIALS AND METHOD

This type of research is an analytic survey with a cross-sectional method approach, namely a survey that studies the relationship between the independent variables and the dependent variable by taking measurements that aim to determine

the relationship between age and parity of mothers giving birth with preeclampsia**.**

The case population in this study were all birth mothers diagnosed with preeclampsia at the Pratama Martua Sudarlis Medan Clinic in 2023, namely 30 people from January to July 2023.

The sample in this study is part of the population, which the researcher will observe and measure. Sampling was done by total sampling.

Total retrieval is based on population, namely all mothers with preeclampsia as many as 30 people as cases.

Related types of secondary data were collected from archival documents in 2023 medical records and inpatient register books in the midwifery room, patient status books and profile books of the Pratama Martua Sudarlis Medan Clinic in 2023. The research variables consisted of independent variables (independent variables), namely variables that influence, and the dependent variable (dependent variable) is the variable that is affected. In this study, the independent variables were the age and parity of the pregnant women and the dependent variable, namely preeclampsia.

Operational definitions in this study include:

1. The dependent variable

a. Preeclampsia is the onset of hypertension accompanied by proteinuria and edema due to pregnancy after 20 weeks of gestation or immediately after delivery.

2. Independent variables

a. Age is the length of time lived or existed (since birth or held). One of the causes of maternal death from reproductive factors is maternal age

b. Parity of the number of fetuses weighing more than or equal to 500 grams who have

been born alive or dead.

Based on the results of research that has been conducted on the relationship between age and parity of mothers giving birth to the incidence of preeclampsia at the Pratama Martua Sudarlis Clinic in Medan in 2023, the following data is obtained:

Frequency distribution of the relationship between age and parity of mothers giving birth to the incidence of preeclampsia at the Pratama Mertua Sudarlis Clinic Medan in 2023 based on Age.

No.	Age	F	%
1.	20-35	22	73,3
2.	>35	8	26,7
Total		30	100

Based on the table above, of the 30 respondents aged 20-35, there were 22 people (73.3%) while those aged > 35 were 8 people (26.7%).

Frequency distribution of the relationship between age and parity of mothers giving birth to the incidence of preeclampsia at the

Pratama Mertua Sudarlis Clinic in Medan in 2023 based on Parity.

No.	Parity	F	%
1.	Primipara	18	60,0
2.	Multipara	12	40,0
Total		30	100

Based on the table above, out of 30 primipara parity respondents, there were 18 people (60.9%) while multiparity parity were 12 people (40.0%).

Frequency distribution of preeclampsia events at the Pratama Martua Sudarlis Medan Clinic in 2023 based on Preeclampsia.

No.	Preeclampsia	F	%
1.	Mild Preeclampsia	15	50,0
2.	Severe Preeclampsia	15	50,0
Total		30	100

Based on the above table, 15 people (50.0%) fall into the category of mild

preeclampsia, while 15 people (50.0%) have severe preeclampsia.

Bivariate analysis is useful for knowing the relationship between age and parity of the mother giving birth to the incidence of preeclampsia at the Pratama Mertua Sudarlis Clinic Medan in 2022 using Chi-square, so the following data is obtained:

Cross-tabulation of the relationship between maternal age and the incidence of preeclampsia at the Pratama Mertua Sudarlis Clinic in Medan in 2023 Cross-tabulation between maternal parity and the incidence of preeclampsia, parity primiparas with mild preeclampsia as many as 12 people (40.0%), parity primiparas with severe preeclampsia as many as 6 people (20.0%), multipara parity with mild preeclampsia as many as 3 people (10, 0%), parity category is not good (> 35) with severe preeclampsia 9 (40.0%). Based on the results of the Chi-square test, a sig p-value of 0.030 <0.05 was obtained, which means that there is a relationship between the quality of mothers giving birth and the incidence of preeclampsia at the Pratama Mertua Sudarlis Clinic in Medan in 2023.

DISCUSSION

The relationship between the age of the mother giving birth and the incidence of preeclampsia at the Pratama Martua Sudarlis Clinic in Medan in 2023.

Based on the cross tabulation between the age of the mother giving birth and the incidence of preeclampsia, the age category (20-35) with mild preeclampsia was 15 people (50.0%), the age category (20-35) with severe preeclampsia was 7 people

(23.3%)). Age category (> 35) with severe preeclampsia 8 (26.7%).

Based on the results of the Chi-square test, a sig p-value of 0.001 <0.05 was obtained, which means that there is a relationship between the age of the mother and the

incidence of preeclampsia at the Pratama Mertua Sudarlis Clinic in Medan in 2023.

This research is in line with research conducted by Etika Desi Yogi, Hariyanto, Elfrida Sonbay, 2014. The title of the research is the Relationship Between Age and Preeclampsia in Pregnant Women at the KIA Polyclinic at Kefamenanu Hospital, North Central Timor District.

The results of his research showed the chi square test (p = 0.033) that there was a significant relationship between age and preeclampsia in pregnant women with a low level of closeness.

This research is not in line with that conducted by Sutrimah, Mifbakhuddin, Dwi Wahyuni, 2014. The title of the research is Factors Associated with the Incidence of Preeclampsia in Pregnant Women at Roemani Muhammadiyah Hospital Semarang. Where the results of the study there was no significant relationship between age risk factors and the incidence of preeclampsia (p = 0.768) (OR = 1.190).

Age is the length of time lived or existed (since birth or held). One of the causes of maternal death from reproductive factors is maternal age. In the period of healthy reproduction, it is known that the safe age for pregnancy and childbirth is 20-30 years. Maternal deaths in pregnant and giving birth women under the age of 20 years are 2 to 5 times higher than maternal deaths that occur at the age of 20 to 29 years. Maternal mortality increases again after the age of 30 to 35 years. (19,20)

According to the researchers' assumptions from the results of research conducted at the Pratama Martua Sudarlis Medan Clinic in 2023 the majority of respondents were aged 20-35 years, pregnancies that occur at ages over 35 years have a tendency of not meeting strong nutritional needs so that it will have an impact on preeclampsia.

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Maternal age during pregnancy affects the condition of the mother's pregnancy because apart from being related to the maturity of the reproductive organs it is also related to psychological conditions, especially readiness in accepting pregnancy so that the age of the mother in labor is very closely related to preeclampsia where the increasing age of the mother in labor will also increase the blood pressure in the mother and also weakening of heart pressure thus this will trigger the occurrence of preeclampsia. At the age of over 35 years, the habit factor of consuming foods that are high in salt and often consume fast food or instant foods that are high in flavoring agents, preservatives is very at risk of preeclampsia in pregnant and maternity women, especially since the mother has a history of hypertension and preeclampsia from her parents.

The relationship between maternal parity and the incidence of preeclampsia at the Pratama Mertua Sudarlis Medan Clinic in 2023.

Based on table 4.7 above, the cross tabulation between parity of mothers giving birth and the incidence of preeclampsia, primipara parity with mild preeclampsia is 12 people (40.0%), primipara parity category with severe preeclampsia is 6 people (20.0%). The multipara parity category with mild preeclampsia was 3 people (10.0%), the multipara parity category (> 35) with severe preeclampsia was 9 (40.0%).

Based on the results of the Chi-square test, a sig p-value of 0.030 <0.05 was obtained, which means that there is a relationship between maternal parity and preeclampsia at the Pratama Mertua Sudarlis Clinic in Medan in 2023.

This research is also in line with research conducted by Mardiani Novita Rahayuti, Neli Husniawati, 2013. The research title is Factors Associated with the

Occurrence of Preeclampsia in Third Trimester Pregnant Women at the Pasar Rebo District Health Center, East Jakarta. The results of the study show a value (p = 0.031) there is a significant relationship between age, parity, occupation, education, knowledge with the occurrence of preeclampsia, and a history of maternal disease with the occurrence of preeclampsia.

This research is not in line with that conducted by Sutrimah, Mifbakhuddin, Dwi Wahyuni, 2014. The title of the research is Factors Associated with the Incidence of Preeclampsia in Pregnant Women at Roemani Muhammadiyah Hospital Semarang. Where the results of the study showed that there was no significant relationship between parity risk factors and preeclampsia (p = 0.313) (OR = 0.600).

Parity is the number of fetuses weighing more than or equal to 500 grams who have been born alive or dead. If the body weight is not known, the gestational age is used, which is 24 weeks. The pregnancy is not more than 5 times, Grande multigravida is a woman who has been pregnant more than 5 times.

According to the assumptions of age researchers from the results of research conducted at the Pratama Martua Sudarlis Clinic in Medan in 2023 parity of mothers giving birth will trigger preeclampsia in accordance with previous studies Parity is the number of fetuses weighing more than or equal to 500 grams who have been born alive or dead . If the body weight is not known, then the gestational age is used, which is 24 weeks. The classification of parity for women who are still pregnant or have been pregnant is based on the number according to the Perdiknakes-WHO-JPHIEGO, namely Primigravida is a woman who is pregnant for the first time, Multigravida is a woman who has been pregnant several times, where the

pregnancy is no more than 5 times, Grande multigravida is a woman who has been pregnant more than 5 times.

CONCLUSION

Based on research conducted at the Pratama Martua Sudarlis Clinic in Medan in 2023, the researchers obtained the following results: Of the 30 respondents aged (20-35) there were 22 people (73.3%) while those aged >35 were 8 people (26.7%). Of the 30 primipara parity respondents, there were 18 people (60.9%) while there were 12 people with multiparity parity (40.0%).

Based on the results of the Chi-square test, a sig p-value of 0.001 <0.05 was obtained, which means that there is a relationship

between the age of the mother and the incidence of preeclampsia at the Pratama Martua Sudarlis Clinic in Medan in 2023.

Based on the results of the Chi-square test, a sig p-value of 0.030 <0.05 was obtained, which means that there is a relationship between maternal parity and the incidence of preeclampsia at the Pratama Martua Sudarlis Clinic in Medan in 2023.

SUGGESTION

It is hoped that mothers who give birth will check themselves since they are young, look for signs of pre-eclampsia at each examination and treat them immediately if they are found, terminate the pregnancy as much as possible at 37 weeks of pregnancy and above, if treated, the signs of pre-eclampsia cannot disappear.

It is hoped that health workers can add information and knowledge about the age and parity of pregnant women with preeclampsia.

The results of this study can be a source of reading for students of the STIKes Mitra Husada Medan Midwifery Program in the future so that they can continue research on the relationship between age

and parity of pregnant women with preeclampsia.

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