Characteristics Of Maternal Women Experienced With Preeclamsm At Kayuagung Regional General Hospital In 2022

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Abstract - **The maternal mortality rate caused by preeclampsia is getting higher and higher at the Kayuagung Regional General Hospital. This research method is descriptive, and the samples used were all patients diagnosed withpreeclampsia. The results of the study with age characteristics were obtained with a high risk of 42.7% and a low riskof 57.2%, while parity characteristics were obtained with a high-risk category of 33.7% and a low-risk category of 66.3%. For educational characteristics in the low category, the figure was 50.6% and in the high category it was 49.6%. The research conclusion is that there is still a high category of patients experiencing preeclampsia.**

Keywords - **Preeclampsia; Age; Parity; Education.**

I.   INTRODUCTION

The high maternal mortality rate (MMR) is influenced by low health and nutritional status. Judging from the health status of women, especially pregnant women, based on data from the Ministry of Health, around 28.8% of pregnant women suffer from hypertension. Hypertension can cause cardiovascular disorders which area factor in maternal death during childbirth [1].

Preeclampsia is hypertension at 20 weeks' gestation or after delivery with blood pressure ≥140/90 mmHg measured twice 4 hours apart accompanied by proteinuria of 300 mg protein in the urine for 24 hours. [2] Possible causes of preeclampsia include abnormal vascular thromboembolic invasion, lack of maternal-fetal immune tolerance and maternal maladaptation to cardiovascular and inflammatory changes during pregnancy[3] dysfunction of other maternal organs such as renal insufficiency (creatinine ≤ 90 umol/L), liver involvement (increased transaminase or epigastric pain), neurological complications, hematological complications, fetal growth restriction [4]. Several maternal and clinical risk factors, either alone or in combination, can contribute to a high risk of preeclampsia, including increasing maternal age above 40 years, parity, weight gain in pregnancy, maternal age, multiple pregnancies, history of preeclampsia, diabetes, chronic hypertension and infections, multifetal pregnancy, kidney disease, antiphospholipid syndrome, lupus and in vitro fertilization are thought to play an influential role in the development of preeclampsia [5].

According to the signs, there are two types of preeclampsia, namely mild and severe preeclampsia. An increase in blood pressure at 20 weeks of pregnancy can be said to be a patient experiencing preeclampsia coupled with an increase in systolic and diastolic blood pressure ≥140/90 mmHg accompanied by proteinuria. The age of 20 - 35 years is essentially the best age for women to get pregnant because this age is the age that is not at risk because the female organs have reached the mature stage of giving birth. [6]. Ages under 20 years and over 35 years are also known as the risk age for experiencing pregnancy complications. At the age of <20 years, the uterus has not yet reached the normal size for pregnancy, so the possibility of disruption in pregnancy is greater. At the age of > 35 years, a degenerative process occurs which results in structural and

functional changes in peripheral blood vessels, making it more susceptible to preeclampsia. [7]. Parity 2 – 3 and birth spacing > 5 years birth spacing is a risk factor for preeclampsia and high-risk pregnancy.

Complications from pregnancy such as AKI are a serious problem because the incidence of preeclampsia continues to increase from year to year [8]. Hypertension can cause dangerous heart problems in pregnant or postpartum women [9].

II. METHODE

This research is a retrospective descriptive study based on medical record data to determine the characteristics of patients experiencing preeclampsia at the Kayuagung Regional General Hospital in 2022. The sample in this study used the total sampling method, that is, the sample was all maternal patients with a diagnosis of preeclampsia and fulfilled the inclusion criteria such as having information on age, parity and education listed in the medical record when the patient was first admitted to the Kayuagung Regional General Hospital.

III. RESULTS AND DISCUSSION

In research conducted at the Kayuagung Regional General Hospital in 2022, based on the characteristics ofpatients who experienced preeclampsia, a total sample of 89 patients met the inclusion criteria, with the following distribution.:

Table 1. Distribution of characteristics of preeclampsia patients based on age at risk

Age	n	%
High risk	38	42.7
Low risk	51	57.3
Total	89	100

From table 1, it can be seen that the distribution of patients based on age shows that the high-risk group was 38 people (42.7%) while the respondents with low-risk age were 51 people (57.3%). Pregnant women aged less than 20 years and older than 35 years have a higher risk of developing severe preeclampsia compared to women aged 20 to 35 years.

Women over 35 years of age tend to more easily experience structural and functional disorders in the body due to the degenerative process of cells in the body, especially in the circulation of blood vessels which is related to increased blood pressure activity. These results are in accordance with research conducted by Ulfa et. Al around 52 people (43.3%) were at low risk of experiencing preeclampsia[10]. However, the results of this study do not match the results of research conducted by Arwan and Sriyanti which states that the highest age of patients with preeclampsia occurs at more than 35 years of age. [7]. At this age you should be wary of experiencing preeclampsia as a complication of pregnancy. [11]

Table 2. Distribution of characteristics of preeclamptic patients based on parity

Parity	n	%
High risk	30	33.7
Low risk	59	66.3
Total	89	100

From table 2. Distribution of parity with the number of patients experiencing high risk preeclampsia as many as 30 people (33.7%) and those experiencing low risk preeclampsia as many as 59 people (66.7%). Parity in this study is the number of children the respondent gave birth to, both live and dead. Parity is said to be at riskif it is the first pregnancy and there are more than 4 children. Primapara is one of the causes of preeclampsia, where primipara mothers are twice as likely to experience preeclampsia

as multiparous women[4]. In research that has been conducted based on parity, the majority of mothers were multigravida (low risk) 59 people (66.3%). This research is in accordance with research from Sulastri, et. al obtained pregnant women with low risk as many as 84.8% of the total number of respondents [12]. A parity of more than three is the safest for getting pregnant, while a high parity is a risky parity caused by pregnancy complications [13]. Pregnant women with a parity of more than four can cause elasticity disorders in the uterus [14]. Research from Laila, E, F., shows that multiparous women mostly experience mild preeclampsia around 73.1%[15]

Table 3. Distribution of characteristics of preeclampsia patients based on education

Education	n	%
Low category	45	50.6
High category	44	49.4
Total	89	100

From table 3, it shows that the number of respondents who had education in the high-risk category was 45 people (50.6%) while the low risk was 44 people (49.4%). In the research, the education level in the low category is elementary school (SD), junior high school (SMP), senior high school (SMA), while the high category of education is strata 1 or above. A person's knowledge can be influenced by education because with good education, healthy living behavior will occur. Education itself is said to have an impact on awareness of the importance of health.[16]. The research data above is in line with research conducted by Hipni, R, where 22% of 100 people diagnosed with preeclampsia had a low education category and 18% had a high education category. The higher the education, the better the knowledge [17]

IV. CONCLUSION

From the research and discussion that has been obtained regarding the characteristics of preeclampsia patients based on age, parity and education of 89 people with a diagnosis of high risk preeclampsia, it can be concluded that the distribution of preeclampsia patients based on age is 42.7%, based on parity characteristics those at high risk are 33.7% while the characteristics based on low category education of 50.6%

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