

Analysis Characteristics of Pregnant Mother With Preeclampsia in Agronursing Area

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ABSTRACT

Background: Maternal Mortality Ratio (MMR) is an indicator of health and quality of human resources. One of the causes of MMR is preeclampsia. Preeclampsia is an increase in blood pressure during pregnancy, which it cannot yet be determined. **Purpose:** This study aimed to analyze the characteristics of pregnant women with preeclampsia in seven hospitals in the agriculture area.

Methods: Respondents obtained were 441 pregnant women with preeclampsia and analyzed by frequency distribution.

Results: The results of the study show that the distribution of patient preeclampsia was most often found at RSUD Dr. Abdoer Rahem that is a number of 125 patients (28.3%). The most characteristic mothers with preeclampsia on reproductive age (75.5%), primipara (54.6%), no have a history of the contagious disease (95.9%), no have a history of preeclampsia (83.2%). The most prevalent preeclampsia have a history of preeclampsia.

Conclusion: Nurses conduct studies on pregnant women to prevent preeclampsia through a characteristic analysis of pregnant women with preeclampsia.

Keywords: Characteristics, Preeclampsia, Pregnancy

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BACKGROUND

Maternal mortality and morbidity is a major problem in developing countries. This number is one indicator of the health and quality of human resources and how the quality of future generations. In countries with high MMR, the country has a low health status, where it is also predicted that 585,000 mothers die during pregnancy or delivery throughout the world. (WHO, 2014). The Maternal Mortality Rate (MMR) in Indonesia is still high. In 2016 the MMR in Indonesia showed 305 in 100,000 live births (Ministry of Health, 2016). Whereas in the same year in East Java there were 91 per 100,000 live births which increased from the previous year (IDHS, 2016). The high MMR is caused by several factors.

The cause of MMR, in general, is still not clearly identified. WHO explained that preeclampsia was the most common cause of death compared to other cases (WHO, 2011). Preeclampsia is a risk in pregnancy that occurs in 3-7% of pregnant women who can cause death (Lowdermilk, Perry & Cashion, 2013). This is the same as the cause of death in Indonesia. In Indonesia, almost 30% of MMR is caused by hypertension in pregnancy (preeclampsia) (Indonesian Health Profile 2014). Whereas in East Java it is still dominated by risks in pregnancy such as bleeding and preeclampsia. This preeclampsia is a direct cause of death in the mother. This case of preeclampsia is caused by several factors.

Various factors that cause preeclampsia are not yet known. Risk factors for preeclampsia include age, nutritional status, genetics, parity, previous preeclampsia history, diabetes, lifestyle, which are motivated by the level of education (Angraini, Tamela, & Fitrayeni, 2014; Nishimoto et al, 2009). The uncertainty of these causative factors requires further study to continue to do research to determine the exact conditions or causes in each region and maternal character.

OBJECTIVE

This study aimed to analyze the characteristics of pregnant women with preeclampsia in seven hospitals in the agriculture area.

METHODS

The method in this study is descriptive analysis. The researchers described the occurrence of preeclampsia in pregnant women in several hospitals that showed the characteristics of the agro-industrial area. Some hospitals that were taken were Hospital in Agro-industrial area which reflected the characteristics of the plantation community with patients who were employees or families of plantation employees (Elizabeth Hospital, Jember Clinic Hospital, Kaliwates Hospital, Djatiroto Hospital), Dr. Abdoer Rahem Hospital depicting pregnant women in coastal areas, Srikandi Hospital, and Dr. Haryoto Hospital. Respondents were mothers who were treated in January 2018 until July 2018. The approach in this study was a cross-sectional approach, where variables suspected of being risk factors were taken together. The data used are secondary data. The overall number of respondents obtained was 441 pregnant women with preeclampsia. Data were obtained for analysis with the frequency distribution.

The participants were assured that their engagement was voluntary, and that anonymity, privacy, and confidentiality of the data were guaranteed. Furthermore, they were informed about the purpose and the method of the study before signing a written informed consent. The questionnaires were distributed to eligible participants at the Dr. Abdoer Rahem Hospital, and respondents were asked to complete and return them in the same time

RESULTS

Table 1 Distribution frequency distribution patient preeclampsia at seven Hospital

Hospital	Frequency	Percentage
Srikandi Hospital, Jember	97	22.0
Dr. Abdoer Rahem Hospital	125	28.3
RSPTPN Djatiroto	40	9.1
Dr.Haryoto Hospital, Lumajang	92	20.9
RSPTPN Jember Clinic	33	7.5
RSPTPN Kaliwates	27	6.1
RSPTPN Elizabeth	27	6.1
Total	441	100

Based on table 1 shows that shows that the distribution of preeclampsia patients is most often found in Dr. Abdoer Rahem Hospital is a total of 125 patients (28.3%), and the least are in RSPTPN Kaliwates and RSPTPN Elizabeth each of 27 patients (6.1%).

The results for the characteristics of each respondent are explained in the following table.

Table 2 Frequency Distribution Characteristics Respondents were based on age, parity, medical history, previous preeclampsia history, babies born with low birth weight, contraception used, complications of early rupture of membranes (n = 441)

Characteristics	Frequency	Percentage
Age		
Too Young	31	7.0
Reproduction	333	75.5
Too Old	77	17.5
Parirtas		
Primipara	241	54.6
Multipara	160	36.3
Grandemultipara	40	9.1
History Health Previous		
Not there is disease first	423	95.9
There is hypertension before pregnant	12	2.7
There is Diabetes MellitusBefore Pregnant	6	1.4
History Preeclampsia Previous		
Not there is history preeclampsia	367	83.2
There is a history preeclampsia	74	16.8
Total	441	100

Based on table 2 shows that most mothers with preeclampsia at reproductive age (75.5%), primipara (54.6%), did not have a history of previous infectious or genetic diseases (95.9%), did not have a previous history of preeclampsia (83 , 2%), do not use contraception (53.5%).

DISCUSSION

The distribution of patients with preeclampsia was found most at the Dr. Abdoer Rahem Hospital. Dr. Abdoer Rahem Hospital Situbondo is the only referral hospital in Situbondo Regency. This hospital has an operating room and an obstetrician. Preeclampsia mothers are encouraged to deliver in hospitals with adequate facilities if complications occur. So that from existing data this hospital has more preeclampsia patients than other hospitals. The distribution of patients with preeclampsia was at least in RSPTPN Elizabeth Hospital. RSPTPN Elizabeth is a hospital in the agro-industrial area, where the highest number of patients is PT Perkebunan Nusantara. This shows that the number of patients who come is more limited than other hospitals. While Kaliwates Hospital is also the same hospital in the agro-industrial area as Elizabeth Hospital, but because the location of Kaliwates Hospital is in the city of Jember which has many health services, the number of patients is also more limited.

The characteristics of patients with preeclampsia in the seven hospitals showed that most were in reproductive age. Reproductive age is a mature age both psychologically and physiologically to have children. A person's reproductive age for having children is aged 20 years to 35 years. Pregnancy less than the age of 20 years and more than 35 years is a risky age for having children, where this age will experience many complications in pregnancy and childbirth. The results of this study indicate that the distribution of respondents with preeclampsia was the highest in reproductive age.

Some studies show that preeclampsia occurs in mothers with advanced age or more than 35 years. According to Lamminpaa, Julkunen, Gissler & Hainonen (2012) states that the age at which preeclampsia occurs is greater in women > 35 years of age compared to mothers aged <35 years. This is similar to the results of the study by Cavazos-Rehg, et. Al. (2015) that the age of being too young and too old is at risk of experiencing preeclampsia and other risks of pregnancy.

Parity in the study showed that the majority of patients with preeclampsia were primipara mothers. Primiparous mothers in the study were those who had reproductive age, this does not mean that the study showed that primiparas were more at risk for preeclampsia than multiparas or grandemultiparas. Parity which is more at risk for preeclampsia is grandemultipara. Based on the research of Opitasari & Andayasari (2014), it was shown that grandemultipara was more at risk of developing preeclampsia compared with multiparas. The same thing was also stated by Pratiwi & Wantonoro (2015) that mothers at risk of preeclampsia were primipara and grandemultipara compared to multiparas. The results of this study showed that the risk factors in pregnancy were due to the absence of past experience about pregnancy care, while at risky grandemultipara mothers in pregnancy because of a decrease in the reproductive system.

In the past medical history, the majority of respondents did not have a history of infectious diseases or genetic diseases. This shows that the respondent is in a healthy condition before pregnancy. Some research results show that past health conditions will affect the occurrence of preeclampsia. According to Shamsi's research, et al. (2010) that a history of hypertension before pregnancy, diabetes, mental illnesses is at risk of the occurrence of preeclampsia. This is also supported by the study of Smith, et al. (2009) that a history of cardiovascular disease is at risk for preeclampsia. Optimal physiological conditions will experience adaptation to the condition of pregnancy. Mothers with physiological disorders, mothers will experience physiological adaptations that are riskier than healthy mothers.

A small proportion of pregnant women with preeclampsia have a history of preeclampsia in a previous pregnancy. This suggests that preeclampsia in pregnancy now increases the risk of preeclampsia in previous pregnancies. The role of health workers to detect preeclampsia in pregnant women at risk or do not have risk conditions is very important (Sabar et al., 2018). Based on research conducted by Wright, Syngelaki, Akolekar, Poon & Nicolaides (2015), it was explained that the risk of preeclampsia will increase in women who have a history of preeclampsia. This is also the same as Meege, Pels & Helewe (2014) that preeclampsia mothers will experience preeclampsia again in the next pregnancy. The results of this study indicate that respondents who had a history of preeclampsia were less than those who did not have a history of preeclampsia because the majority of respondents were primipara so they did not have a history of previous pregnancies.

CONCLUSION

After conducting research on the analysis of the characteristics of preeclampsia in pregnant women at the Karisidenan (around of) Besuki Regional Hospital, it can be concluded that the majority of respondents were primipara, so this shows that the respondents were in reproductive age, with a history of preeclampsia and the majority of clients did not have a history of infectious diseases or genetic disease. Based on this, to further refine the results of the study, further data analysis was carried out to determine the modeling of the risk factors for preeclampsia.

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