RISK FACTORS OF PREECLAMSIA IN PREGNANT WOMEN IN SOUTH KONAWE DISTRICT HOSPITAL

Nuvi Yanti Roka[1], Early Masita[1], Ayu Utami Suddin[1]

[1]Master Of Public Health Study Pogram, Faculty of Health Sciences, Mandala Waluya University

ARTICLE INFO

Corresponding Author:

Nuvi Yanti Roka

Email:
rokanuviyanti@gmail.com

ABSTRACT

Preeclampsia is a dangerous pregnancy complication, characterized by high blood pressure and organ damage, which can cause maternal and fetal morbidity and mortality. This study aims to identify risk factors for preeclampsia in pregnant women at the South Konawe District Hospital. The research method used was analytical descriptive with a cross-sectional approach. The risk factors analyzed include maternal age, parity, history of preeclampsia, chronic hypertension, obesity, lifestyle, socio-economic status and access to health services. Data was obtained from medical records of pregnant women during 2023. Research results show that age over 35 years, history of preeclampsia, chronic hypertension, obesity (IMT > 30), and low socioeconomic status are the main risk factors for preeclampsia. Recommendations are aimed at improving health monitoring of high-risk pregnant women and improving access to health services in these areas.

INTRODUCTION

Preeclampsia is a specific hypertensive disorder of pregnancy that usually appears after 20 weeks of gestation and can develop into serious conditions such as eclampsia. Preeclampsia is often accompanied by proteinuria (the presence of protein in the urine) and damage to other organs such as the kidneys and liver. This complication can endanger the lives of the mother and fetus, and is one of the causes of morbidity and mortality throughout the world, especially in developing countries (1,2).

Risk factors for preeclampsia include maternal age that is too young or too old, history of pregnancy, chronic hypertension, diabetes, first pregnancy (nulliparous) and multiple pregnancies(3,4,7). In addition, environmental factors such as socioeconomic status, lifestyle, and access to health services also contribute to an increased risk of preeclampsia (5,6).

Kabupaten Konawe Selatan is one wilayah di Sulawesi Tenggara with a fairly high incidence of preeclampsia. From data RSUD Kabupaten Konawe Selatan shows that there is an increase in cases of preeclampsia from year to year, but not much research has been done on local risk factors(9). Therefore, this study aims to identify factors that play a role in increasing the risk of preeclampsia in pregnant women in this region, with the hope of providing insight for improving the prevention and treatment of preeclampsia in the future(8).

METHODOLOGY

Research Design

This study used a descriptive analytical cross-sectional design. The research was conducted at the South Konawe District Hospital with data collection carried out retrospectively using medical records of pregnant women treated from January to December 2023.

Population and Sample

The population in this study were all pregnant women undergoing treatment at RSUD Kabupaten Konawe Selatan during the research period. Samples were selected randomly using the probability sampling method with the following inclusion criteria.

Gestational age > 20 weeks

Have complete data in the medical record

Did not experience other complications outside of preeclampsia

Of a total of 200 pregnant women who met the criteria, 150 of them were selected as samples in this study.

Research Variables

 The variables analyzed in this research include: 1) Independent variables: maternal age, parity, history of preeclampsia, chronic hypertension, obesity (IMT > 30), socio-economic status, lifestyle (eating patterns, smoking habits, access to health services); 2) Dependent variable: Incidence of preeclampsia

Data analysis

Data were analyzed using statistical software. Univariate analysis was carried out to describe population characteristics, while multivariate analysis was used to test the relationship between independent variables and dependent variables. Odds Ratio (OR) is used to determine how much risk factors influence the incidence of preeclampsia.

RESULTS AND DISCUSSION

Demographic Characteristics of Respondents

Most of the respondents in this study were in the 20-35 year age group (60%) with an average age of 28.4 years. As many as 25% of respondents were over 35 years old, and this group showed a significantly increased risk of preeclampsia (QR 2 .1; $p<0.05$).

Risk Factors for Preeclampsia

The results of the analysis show that several factors have a significant contribution to the occurrence of preeclampsia, including: 1) Maternal age over 35 years: The risk of preeclampsia increases 2X in pregnant women over 35 years of age; 2) History of Preeclampsia: Mothers with

a history of preeclampsia in previous pregnancies have a 3.5x higher risk than mothers without such a history; 3) Chronic hypertension: as many as 20% of mothers with chronic hypertension experience preeclampsia, with a risk 4.5x higher than mothers who do not have hypertension; 4) Obesity (IMT . 30): Pregnant women who are obese have a 3x greater risk of experiencing preeclampsia compared to mothers with normal IMT; 4) Low Socioeconomic Status: Low socio-economic status contributes to an increased risk of preeclampsia which is thought to be related to less access to quality health services.

The findings of this study are consistent with various previous studies which show that advanced maternal age, a history of preeclampsia, chronic hypertension, and obesity are the main risk factors for preeclampsia which are related to lack of access to adequate health services and unhealthy lifestyles. Considering the importance of early detection, health workers at RSUD Konawe Selatan It is necessary to carry out intensive screening of pregnant women with these risk factors.

CONCLUSION

Maternal age above 35 years, history of preeclampsia, chronic hypertension, obesity, and low socioeconomic status have been proven to significantly increase the risk of preeclampsia. Intensive prevention efforts and education for high-risk pregnant women need to be increased to reduce the incidence of preeclampsia and the complications that accompany it in Kabupaten Konawe Selatan.

REFERENCES

1. Sari, N. M., & Prabowo, A. (2021). "Risk Factors for Preeclampsia in Pregnant Women: A Systematic Review." Journal of Reproductive Health, 12(1), 25-34.

2. Rahmawati, A., & Sumarni, S. (2020). "Relationship between Body Mass Index and Age of Pregnant Women with the Incidence of Preeclampsia." Indonesian Journal of Obstetrics and Gynecology, 43(2), 150-157.

3. Lestari, D. S., & Ananda, R. (2019). "History of Hypertension and Preeclampsia in Pregnancy: Case Study in RSUD." Journal of Midwifery and Reproductive Health, 7(1), 45-52.

4. Yuliana, R., & Dewi, A. (2018). "Comorbidities and Risk of Preeclampsia in Pregnant Women: Analysis of Data in Regional Hospitals." Journal of Public Health, 14(3), 115-122.

5. Nugroho, S., & Astuti, W. (2017). "Prevalence of Preeclampsia and Risk Factors in South Konawe District Hospital." Medical Scientific Journal, 6(1), 30-37.

6. Kurniawati, N. (2016). "Age and Health History of Pregnant Women as Risk Factors for Preeclampsia." Journal of Health Research, 10(2), 80-86.

7. Fatimah, R., & Susanti, E. (2015). "The Impact of Obesity on the Incidence of Preeclampsia in Pregnant Women." Journal of Nutrition and Health, 9(1), 70-77.

8. Sugiarto, A. & Lestari, Y. (2013). "Preeclampsia Risk Factors in Urban and Rural Areas." Journal of Environmental Health, 2(3), 110-118.

9. Widiastuti, S., & Rizki, F. (2012). "The Relationship Between Diet and Preeclampsia Among Pregnant Women." Journal of Health and Nutrition, 8(2), 60-67