

The relationship between mother's age and parity and the incident of hypertension in pregnant women at Kayuagung Hospital year 2022

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ABSTRACT

Hypertension in pregnancy is an increase in blood pressure that occurs during pregnancy, with systolic blood pressure ≥ 140 mmHg and diastolic blood pressure ≥ 90 mmHg in women who were previously normotensive. The purpose of this study was to determine the relationship between age, parity and the incidence of hypertension in pregnant women at Kayuagung Hospital in 2022. The research method is a quantitative, analytic serve method using a cross sectional approach, taking total sampling. The population in this study were 85 samples. The data collection instrument was in the form of a checklist sheet with univariate and bivariate analysis techniques with data analysis using Chi-Square p value = 0.003 there was a significant relationship between maternal age and the incidence of hypertension in pregnant women, p value = 0.003 there was a significant relationship between parity with the incidence of hypertension in pregnant women. The conclusion obtained from the study is that there is a relationship between age and maternal parity with the incidence of hypertension in pregnant women.

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INTRODUCTION

Pregnancy hypertension is one of the causes of morbidity and death throughout the world for both mother and fetus(Zidni et al., 2022)(Arikah et al., 2020)(Pujiati & Saribu, 2022)(Ikhsan et al., 2023). Globally, 80% of pregnant women's deaths are classified as direct causes of maternal death, namely due to hypertension in pregnant women. obstructed labor, and for other reasons(KUSTRIYAN et al., 2019)(Wibisono, 2020)(Juliathi et al., 2021)(KARTILA, 2023).

According to the World Health Organization (WHO), every day 830 mothers in the world die due to disease or complications during pregnancy and childbirth. 75% of maternal deaths are caused by hypertension and bleeding(Manullang, 2020)(Komariah & Nugroho, 2020)(Sari et al., 2021)(DALIMUNTHE, 2022)(Andriani et al., 2022).

Hypertension is a dangerous disease, especially if it occurs in women who are pregnant. This can cause death for the mother and the baby being born (Porouw & Yulianingsih, 2019) (Yuliana & Dewi, 2022) (Nugraha et al., 2023). Based on 2018 Ministry of Health data, hypertension increases mortality and morbidity rates in pregnant women and as many as 12% of maternal deaths are caused by hypertension (Arikah et al., 2020) (Safitri & Djaiman, 2021) (Yusriani, 2021) (Masriadi et al., 2022) (Ikhsan et al., 2023).

According to data from the South Sumatra Provincial Health Office, the maternal mortality rate (MMR) due to hypertension in pregnancy in 2019 was (26.67%) (Rezky & Navianti, 2020) (Agustina et al., 2022). Meanwhile, according to the OKI Health Office, the maternal mortality rate for Ogan Komering Ilir (OKI) Regency in 2019 was 18 cases and in 2020 the maternal mortality rate dropped to 8 cases (Riani et al., 2022) (Dasarie et al., 2023b) (Dasarie et al., 2023a) (Febriansyah, 2023).

Based on the background of the problem, the relationship between maternal age and parity with the incidence of hypertension in pregnant women will be analyzed. The results of the study are expected to be input for health workers to improve services to patients with hypertension in pregnancy.

RESEARCH METHOD

The population of this study were all pregnant women who experienced hypertension and were recorded in medical record data at Kayuagung Hospital in 2021, totaling 85 people. This study used a total sampling technique where sampling was equal to the population, so all pregnant women who experienced hypertension at Kayuagung Hospital in 2021 amounted to 85 respondents. This study uses age and parity as independent variables, the incidence of hypertension in pregnancy as the dependent variable. This study is a quantitative study using secondary data with the tools used for data collection are checklists and medical record status of pregnant women who experience hypertension at the RSUD. Data analysis is used to test the hypothesis that has been set, namely studying the relationship between variables. Data analysis used in this study is Univariate Analysis, Bivariate Analysis. Univariate analysis will be carried out on each variable, namely the dependent variable in the form of the incidence of hypertension in pregnancy and the independent variable in the form of age and parity. bivariate analysis is carried out on two variables that are thought to be related or correlated, namely between age and parity (independent) with the incidence of hypertension in pregnancy (dependent), using chi-square with a level of significance $\alpha = 0.05$, it is said that there is a significant relationship if the p value (value) is smaller than 0.05 and it is said that there is no significant relationship if the p value (value) is greater than 0.05.

RESULTS AND DISCUSSIONS

Results

Univariate Analysis

Frequency Distribution of Mother's Age

The results are divided into high risk if the mother is < 20 years old and > 35 years old, low risk if the mother is 20-30 years old.

Table 1. Frequency distribution of maternal age with hypertension incidents at Kayuagung Regional Hospital in 2022

No	Age	Amount	Percentage
1	High risk	56	65.9%
2	Low Risk	29	34.1%
Total		85	100%

Source: Secondary Data

From the table data, it shows that the age of mothers (<20 years or >35 years) who are at high risk for the incidence of hypertension is 56 people (65.9%), while the age of mothers (20-35 years) who are at low risk for the incidence of hypertension are 29 people. (34.1%).

Maternal Parity

The research results contained 85 samples with parity frequencies which can be seen in the table.

Table 2. Frequency tabulation of maternal parity and hypertension incidents at Kayuagung Regional Hospital in 2022

No	Number of children	Amount	Percentage
1	One Child	15	17.6%
2	Two Children	11	12.9%
3	Three child	12	14.1%
4	Four Children	38	44.7%
5	Five Children	9	10.6%
	Total	85	100%

Based on the table above, the number of parities for one child is 15 people (17.6%), parities for two children are 11 people (12.9%), parities for three children are 12 people (14.1%), parities for four children are 38 people (44.7%), the parity of five children was 9 people (10.6%).

Frequency Distribution of Maternal Parity

The measurement results are divided into high risk if ≥3 children and low risk if ≤3 children.

Table 3. Frequency distribution of maternal parity with hypertension incidents at Kayuagung Regional Hospital in 2022.

No	Parity	Amount	Percentage
1	High risk	48	56.5%
2	Low Risk	37	43.5%
	Total	85	100%

Source: Secondary Data

From Table 3 above, it can be seen that the parity of mothers at high risk of ≥3 children with the incidence of hypertension is 48 people (56.5%), and the parity of mothers at low risk of ≤3 children with the incidence of hypertension is 37 people (43.5%).

Bivariate Analysis

Relationship between parity and the incidence of hypertension in pregnant women

Table 4. Relationship between maternal age and the incidence of hypertension in pregnant women at Kayuagung Regional Hospital in 2022

Age	Heavy		Hypertension Currently		Total		P value
	N	%	N	%	N	%	
High risk	34	57.7%	22	42.3%	56	100%	0.003
Low Risk	25	87.9%	4	12.1%	29	100%	
Total	59	69.4 %	26	30.6%	85	100%	

Based on Table 4, it was found that 34 people (57.7%) of the sample were at high risk and had severe hypertension, compared to respondents whose age was at low risk and 22 people (42.3%) had moderate hypertension.

The results of the Chi-Square statistical test obtained p value = 0.003, which when compared with the value a = 0.05, then p value ≤ 0.05 so that the Null Hypothesis (Ho) is rejected,

the Alternative Hypothesis (H_a) is accepted. This means that there is a relationship between maternal age and the incidence of hypertension in pregnant women at Kayuagung Hospital in 2021.

Relationship between parity and the incidence of hypertension in pregnant women

Table 5. Relationship between parity and the incidence of hypertension in pregnant women at Kayuagung Regional Hospital in 2022

Parity	Heavy		Hypertension Currently		Total		P Value
	N	%	N	%	N	%	
High risk	27	56.2%	21	43.8%	48	100%	0.003
Low Risk	32	86.5%	5	13.5%	37	100%	
Total	59	69.4%	26	30.6%	85	100%	

Based on Table 5, it was found that 27 people (56.2%) had high risk parity and experienced severe hypertension, compared to 21 people (42.8%) whose parity had low risk and had moderate hypertension. The results of the Chi-Square statistical test obtained p value = 0.003, which when compared with the value $\alpha = 0.05$, then p value ≤ 0.05 so that the Null Hypothesis (H_0) is rejected, the Alternative Hypothesis (H_a) is accepted. This means that there is a relationship between parity and the incidence of hypertension in pregnant women at Kayuagung Regional Hospital in 2021.

Discussion

Univariate Analysis

Mother's Age

Based on the results of the research that has been carried out, data obtained from respondents whose maternal age is at high risk is 56 people (65.9%), compared to respondents whose age is at low risk, which is 29 people (34.1%). Obtained from data taken from Kayuagung Regional Hospital in 2021.

In the healthy reproductive period, it is known that the safe age for pregnancy and childbirth is 20-35 years. Maternal deaths in pregnant and giving birth women increase at ages under 20 years and over 35 years. From the results of this study it can be concluded that hypertension is more common in pregnant women aged <20 years and >35 years compared to pregnant women aged 20-35 years.

Parity

Based on the results of research that has been carried out, data obtained from respondents with high risk maternal parity were 48 people (56.5%), higher than respondents with low risk maternal parity as many as 37 people (43.5%). In pregnancies with low parity, hypertension is very rare because pregnancy is highly anticipated, so mothers really take care of their pregnancies by carrying out routine pregnancy checks, while mothers with high parity tend to rarely have checks so they are susceptible to hypertension. From the results of this study it can be concluded that hypertension is more common in pregnant women with parity > 3 children compared to pregnant women with parity ≤ 3 children.

Bivariate Analysis

This analysis was carried out to determine the relationship between maternal age and parity and the incidence of hypertension in pregnant women.

Relationship between maternal age and the incidence of hypertension in pregnant women

Based on the results of the research that has been carried out, it was obtained that data on maternal age respondents who were at high risk of severe hypertension were 34 people (57.7%), 22 people were moderately hypertensive (42.3%), and 25 people were at low risk of severe

hypertension (87.9%). %), moderate hypertension in 4 people (12.1%). Obtained from data taken from Kayuagung Regional Hospital in 2021.

The results of the Chi-Square statistical test obtained p value = 0.003, which when compared with the value $\alpha = 0.05$, then p value ≤ 0.05 so that the Null Hypothesis (H_0) is rejected, the Alternative Hypothesis (H_a) is accepted. This means that there is a relationship between maternal age and the incidence of hypertension in pregnant women at Kayuagung Regional Hospital in 2021. The results of this study are in accordance with several previous studies which stated that maternal age < 20 years and > 35 years is at risk of developing hypertension in pregnancy.

Mothers aged > 35 years tend to be at risk of developing hypertension, this is because their reproductive ability has decreased and decreased so that hypertension can occur. Meanwhile, at < 20 years of age, this is because they are still growing, so their reproductive abilities have not yet developed optimally.

Relationship between Maternal Parity and the Incident of Hypertension in Pregnant Women

Based on the results of the research that has been carried out, it was obtained that data on maternal parity respondents were 27 people at high risk of severe hypertension (56.2%), 21 people were moderately hypertensive (43.8%), and 32 people were at low risk of severe hypertension (86.5%). %), moderate hypertension in 5 people (13.5%).

The results of the Chi-Square statistical test obtained p value = 0.003, which when compared with the value $\alpha = 0.05$, then p value ≤ 0.05 so that the Null Hypothesis (H_0) is rejected, the Alternative Hypothesis (H_a) is accepted. ThisThis means that there is a relationship between parity and the incidence of hypertension in pregnant women at Kayuagung Hospital in 2021. The results of this study are in accordance with several opinions which state that low parity ≤ 3 are more likely to undergo pregnancy checks than mothers who have parity > 3.

This is because pregnant women with low parity (≤ 3) really hope for their pregnancy, so they routinely carry out examinations and maintain nutritional intake for themselves and their fetuses. In 2019 there were 18 cases and in 2020 the maternal mortality rate fell to 8 cases (OKI Health Office, 2020). Based on the background of the problem above, the author is interested in conducting research with the title "The Relationship Between Maternal Age and Parity and the Incident of Hypertension in Pregnant Women at Kayuagung Hospital in 2021"

CONCLUSION

Based on the results of research and discussion, it can be concluded that based on the incidence of hypertension in pregnant women, 85 samples were found to have hypertension, the incidence of hypertension based on the age of the sample occurred at a high risk age of 56 people (65.9%) and a low risk of 29 people (34.1%), the incidence of hypertension based on the parity of the sample occurred at a high risk parity of 48 people (56, 5%) and low-risk 37 people (43.5%), there is a significant relationship between age and the incidence of hypertension in pregnant women at Kayuagung Hospital in 2022 obtained a p value = 0.003 and there is a significant relationship between parity and the incidence of hypertension in pregnant women at Kayuagung Hospital in 2022 obtained a p value = 0.003. There are limitations in this study, namely the limited number of samples and it is hoped that further research can increase the number of samples so that the quality of research is getting better.

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