

## THE RELATIONSHIP OF MOTHER'S AGE AND PARITY WITH EVENT SEVERE ANEMIA IN PREGNANT WOMEN IN HOSPITAL H. ADAM MALIK IN 2023

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### ABSTRACT

**Background:** Anemia is a condition where the Hb level is below normal. Pregnancy anemia has an adverse effect on the mother and also on the fetus she is carrying, both during pregnancy, childbirth, and the postpartum and subsequent periods. This study aims to determine the relationship between maternal age and parity with the incidence of severe anemia in pregnant women at H. Adam Malik General Hospital in 2023.

**Method:** This type of research is a *cross sectional study* with a *non-probability sampling method* and a *purposive sampling method*. The population is all pregnant women who experience anemia at H Adam Malik General Hospital, totaling 137 mothers. The number of samples used was 58 mothers, obtained using *non-probability sampling*. The data analysis technique used was *chi square*.

**Results:** The results obtained in this study are that there is a relationship between maternal age and anemia with a *p-value* <0.05, and there is a relationship between parity and the incidence of anemia with a *p-value* <0.05

**Conclusion:** There is a relationship between age and parity and the incidence of anemia in pregnant women. Recommended for pregnant women increase awareness on Mother pregnant For utilise information on what causes and what affects anemia during pregnancy And can used as material reading in preventing anemia during pregnancy .

**Keywords:** *Pregnant Women, Anemia, Age, Parity*

### INTRODUCTION

Pregnancy anemia has a negative impact on the mother and also on the fetus she is carrying, both during pregnancy, childbirth, the postpartum period and the following period, low blood levels can reduce the oxygen supply delivered to the fetus. Complications that occur due to anemia in pregnancy are: Abortion (miscarriage), premature birth, shock, can cause infections both during

pregnancy and postpartum as well as severe anemia. . (Munthe Juliana, 2022).

Currently, the cause of maternal death is due to anemia during pregnancy. According to data from *the World Health Organization* (WHO), anemia is the main cause of death in pregnantwomen, accounting for 20 % of 515,000 case.

According to 2018 Riskesdes data, the prevalence of anemia in pregnant women is 48.9%, or 4-5 out of every 10 pregnant women, while the prevalence of anemia according to age is 84.6%, or occurs between the ages of 15 and 24 years. Anemia is a nutritional problem that needs attention from Indonesian society (WHO, 2020).

Based on reports from the District/City Health Profile of North Sumatra Province in 2019, the number of deaths in the last 3 years was found to have fluctuated, namely 205 deaths in 2017, 185 deaths in 2018, and 200 deaths in 2019. If the number of maternal deaths is converted to the Mortality Rate Mother (AKI), the MMR in North Sumatra Province in 2019 was 71.96 per 100,000 KH. This is caused by anemia and bleeding during pregnancy (Health profile, 2019)

Efforts to accelerate the reduction in MMR can be done by ensuring that every mother can access quality maternal health services, such as health services for pregnant women. Health services provided to pregnant women include the provision of 90 blood supplement tablets (TTD). The coverage of giving blood supplement tablets to pregnant women in North Sumatra Province in 2019 was 76.50%, which has not reached the target in the North Sumatra Provincial Health Service Strategic Plan of 80%. (Health profile, 2019)

## RESULT AND DISCUSSION

From the results of research carried out by the author with the title research on the relationship between maternal age and parity with the research results were obtained.

## METHOD

The design of this research is a *cross sectional study*, namely research carried out using a relatively *short time* and a certain place, collecting secondary data regarding the relationship between maternal age and parity and the incidence of anemia in pregnant women at H. Adam Malik General Hospital in 2023.

The sampling technique used is *non-probability sampling* using *purposive sampling*, which is the technique used in this research, where in this research 58 pregnant women were the sample in this research. The type of data used in this research is secondary data from other parties on a regular basis. collecting data or through documents, documentation is a way of collecting research data obtained through medical records related to the problem to be researched. The mother's age and parity were determined using a checklist, as well as the characteristics of the respondent

Univariate analysis is used to obtain an overview of the frequency distribution or proportion size based on the variables studied. Bivariate analysis is used to determine the relationship between the independent (free) variable and the dependent (dependent) variable. This analysis was used with the *chi square statistical test*.

incidence of anemia in pregnant women at H. Adam Malik General Hospital in 2023. The following

**Table 1. Frequency Distribution of Severe Anemia, Age, Parity**

No	Variable	N	%
1	Anemia		
	a. Severe Anemia	50	86.2
	b. Not Anemic	8	13.8
2	Parity		
	a. Primi gravida	15	25.9
	b. Grand egravida	23	39.7
	c. Multi gravida	20	34.5
3	Age		
	a. <21 yrs	15	25.9
	b. >35 years	25	43.1
	c. 21th – 35th	18	30.0
	<b>Amount</b>	<b>58</b>	<b>100.0</b>

From the table above, it can be seen from the respondents that the highest parity was among grandgravidas with 23 respondents amounting to (39.7%). And multigravida with 20 respondents amounting to (34.5%) compared to primigravida with 15 people amounting to (25.9%).

Meanwhile, in the age variable, the most respondents were >35 years old, 25 people were (43.1%) and 18 people aged 21 - 35 years were (30.0%) compared to <21 years old, 15 people were (25.9%).

Anemia	50	86.2
Not Anemic	8	13.8
<b>Total</b>	<b>58</b>	<b>100.0</b>

Based on Table 4.3.1 above, it was found that 86.2% had anemia and 13.8%

did not experience anemia as a comparison.

**Table 4.3.2 Distribution of Respondent Characteristics Based on Parity at the Haji Adam Malik Central General Hospital.**

Parity Variable	N	%
Primigravida	15	25.9
Grandgravida	23	39.7
Multigravida	20	34.5
<b>Total</b>	<b>58</b>	<b>100.0</b>

Based on Table 4.2.2, it was found that (39.7% of respondents were at risk in grandgravidas. In multigravidas they

were at risk (34.5%) and in primigravidas they were at risk (25.9%)

**Table 4.4. 1 Chi Square Test of the Relationship between Maternal Parity and Severe Anemia in Pregnant Women at the Haji Adam Malik Central General Hospital**

Parity Variable	Anemia		Not Anemic		Total		P-Value
	F	%	F	%	F	%	
Primigravida	14	24.1 %	1	1.7 %	15	25.9 %	<b>0.0 10</b>
Grandegravida	16	27.6 %	7	12.1 %	23	39.7 %	
Multigravida	20	34.5 %	0	0 %	20	34.5 %	
<b>Amount</b>	<b>50</b>	<b>86.2 %</b>	<b>8</b>	<b>13.8 %</b>	<b>58</b>	<b>100%</b>	

Based on table 4.4. 1 above, it can be seen that the maternal parity variable shows that respondents with grande gravida are at greater risk of developing anemia in pregnancy by (39.7%) than mothers with multigravida parity who are at risk of (34.5%). Meanwhile in the mother group

Primigravidas are at risk (25.9%) of developing anemia. Through the *chi square test* , a p-value of 0.010 was obtained, where the results were considered related to the bivariate results if the p-value was <0.05. So it can be concluded that there is a relationship between parity and anemia, which means that  $H_a$  is acceptable, namely that there is a significant relationship between anemia and parity.

**Table 4.4. 1 Chi Square Test of the Relationship between Maternal Age and Severe Anemia in Pregnant Women at the Haji Adam Malik Central General Hospital**

Parity Variable	Anemia		Not Anemic		Total		P-Value
	F	%	F	%	F	%	
< 21 years old	15	25.9 %	0	0 %	15	25.9 %	<b>0.0 22</b>
>35 years	18	31.0 %	7	12.1 %	25	43.1 %	
21st-25th	17	29.3 %	1	1.7 %	18	31.0%	
<b>Amount</b>	<b>50</b>	<b>86.2 %</b>	<b>8</b>	<b>13.8 %</b>	<b>36</b>	<b>100%</b>	

Based on table 4.4. 1 above, it can be seen that the maternal age variable shows that respondents aged >35 years are more at risk of developing anemia in pregnancy by (43.1%) than mothers aged 21 to 35

years who are at risk of (31.0%). Meanwhile, the group of mothers aged <21 years were at risk (25.9%) of developing anemia. Through the *chi square test* , a p-value of 0.022 was obtained, where the

results were considered related to the bivariate results if the p-value was  $<0.05$ . So it can be concluded that there is

## DISCUSSION

According to the research results, it is known that some of the respondents aged 20 - 35 years, the healthy reproductive age for women to become pregnant or have children is 20 - 35 years. This age is the right age for mothers to get pregnant or have children. Mothers who are too young (less than 20 years old) and too old (over 35 years old) are gestational ages that are quite at risk of experiencing complications during pregnancy, and during the birthing process. When a mother is too young, her reproductive organs are not fully mature and the mother is not ready to get pregnant because the uterus is not strong enough to support the weight of the fetus. Women who are older ( $> 35$  years) are at higher risk of experiencing *obstetric complications* resulting in perinatal morbidity and mortality. (Munthe Juliana, 2022)

Based on the results of the research, it can be concluded that of the 58 respondents, respondents aged  $>35$  years were more at risk of developing anemia in pregnancy by (43.1%) than mothers aged 21 to 35 years who were at risk of (31.0%). Meanwhile, the group of mothers aged  $<21$  years were at risk (25.9%) of developing anemia. Through the *chi square test*, a p-value of 0.022 was obtained, where the results were considered related to the bivariate results if the p-value was  $<0.05$ . So it can be concluded that there is a relationship between age and anemia

The results of this research are in line with research conducted by Marhaeni

a relationship between age and anemia, which means that  $H_0$  is acceptable, namely that there is a significant relationship between anemia and age.

(2023) Factors that influence the incidence of mild anemia in pregnant women at the Kasi-Kasi Health Center, Makassar City. The results obtained using the *chi-square statistical test* with a p value ( $0.006 < 0.05$ ), this shows that there is a significant influence between age and the incidence of anemia in pregnant women. (marhaeni, 2023)

According to Herlina, pregnant women with high parity have a 1,454 times greater risk of experiencing anemia compared to mothers with low parity. In this condition, there is a tendency that the greater the number of children (parity), the higher the incidence of anemia in pregnant women. (Munthe Juliana, 2022)

Based on the results of research that has been conducted, the majority of the 58 respondents are of grandgravida parity with 23 respondents amounting to (39.7%) This is in accordance with the journal Ririn Riyani, et al (2020) journal title The Relationship Between Age and Parity and the Incidence of Anemia in Pregnant Women. The results of the research show that there is a significant relationship between parity. Using the Chi Square statistical test, significant results were obtained with a p-value. 0.003 ( $<0.05$ ) means that there is a relationship between maternal parity and the incidence of anemia in pregnant women. (Ririn Riyani et al., 2020)

## CONCLUSION

Based on the results of the research and discussion, the author concludes:

1. The incidence of anemia in pregnant women at the Haji Adam Malik Central General Hospital was 58 pregnant women 86.2%
2. There is a relationship between maternal age and the incidence of anemia in pregnant women at the Haji Adam Malik Central General Hospital with  $p$  value = 0.022  $p$ -value <0.05.
3. There is a relationship between maternal parity and the incidence of anemia in pregnant women at the Haji Adam Malik Central General Hospital with  $p$  value = 0.010 <0.05.

There is a relationship between maternal age and parity and the incidence of severe anemia in pregnant women at the Haji Adam Malik Central General Hospital

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