

# Factors Affecting the Event of Anemia in Pregnant Women Trimester III in Puskesmas Namorambe Districts Deli Serdang Year 2022

Nurainun<sup>1</sup>, Basaria Manurung<sup>2</sup>, Kurniani<sup>3</sup>, Arni<sup>4</sup>, Surati<sup>5</sup>

<sup>1,2,3,4,5</sup>Undergraduate Midwifery Study Program, STIKes Mitra Husada Medan

## ARTICLE INFO

### Article history:

Received Sep 19, 2022

Revised Sep 26, 2022

Accepted Okt 17, 2022

### Keywords:

Factors  
Anemia  
pregnant women

## ABSTRACT

Injectable contraception is a way to prevent pregnancy by means of hormonal injections, this type of hormonal contraceptive injection in Indonesia is increasingly being used, the more it is used because of its effective work, practical use, relatively cheap and safe price. This study aims to determine the relationship between the use of 3-month injectable family planning and weight gain in women of childbearing age at the Maga Health Center, Mandailing Natal Regency in 2022. This type of research is an analytical survey with a cross sectional approach. The population is all pregnant women who are at the Maga Health Center, Mandailing Natal Regency in 2022, totaling 36 pregnant women. The number of samples used is 52 people obtained by using purposive sampling technique. Data analysis technique using chi square. The results obtained in this study were from 52 respondents, there was a relationship between the knowledge variable and weight gain with a p value = 0.001, there was a relationship between the variable length of use and weight gain with a p value = 0.002, there was a relationship between the age variable and weight gain body with a value of p = 0.002, there is a relationship between the education variable and weight gain with a p value = 0.003 and there is a relationship between the work variable and weight gain with a p value = 0.001. there is a relationship between the knowledge variable and weight gain, there is a relationship between the variable duration of use and weight gain, there is a relationship between the age variable and weight gain, there is a relationship between the education variable and weight gain and there is a relationship between the work variable and the increase weight. It is suggested to the puskesmas to increase the knowledge of mothers to increase counseling related to the use of injectable contraception.

This is an open access article under the [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.



### Corresponding Author:

Nurainun,  
Undergraduate Midwifery Study Program,  
STIKes Mitra Husada Medan Medan  
Email: [ainunnur929@gmail.com](mailto:ainunnur929@gmail.com)

## INTRODUCTION

Maternal Mortality Rate (MMR) is one indicator to see the success of maternal health efforts. MMR is the ratio of maternal deaths during pregnancy, childbirth and postpartum caused by pregnancy, childbirth, and postpartum or its management but not due to other causes such as accidents in every 100,000 live births (Kemenkes, 2018).

The Ministry of Health uses the second model with an average decline of 5.5% per year as a performance target. Based on this model, it is estimated that by 2030 the MMR in Indonesia will fall to 131 per 100,000 live births. One of the causes of maternal death is bleeding due to anemia (WHO, 2018).

Anemia is a condition of hemoglobin (Hb) levels in the blood (Hb <11gr/dl) caused by a lack of nutrients needed for the formation of Hb. In Indonesia, most of this anemia is caused by a lack of iron (Fe) so it is called iron deficiency anemia or iron nutritional anemia. Pregnant women are one of the groups that are vulnerable to nutritional problems, especially iron nutritional anemia. Iron Deficiency Anemia (IDA) is still a public health problem due to its high prevalence and its impact on the health of mothers and their babies. The high prevalence of IDA affects almost all age groups in society. One of the community groups that have a high prevalence of IDA is the group of pregnant women (Ani, 2018).

## RESEARCH METHOD

This type of research is an analytic observational study using a cross sectional approach, namely to analyze the factors that influence the incidence of anemia in third trimester pregnant women at the Namorambe Public Health Center, Deli Serdang Regency in 2022. The population in this study were all pregnant women in the third trimester at the Namorambe Health Center, Deli Serdang Regency, as many as 58 people. The research sample was pregnant women in the third trimester at the Namorambe Health Center, Deli Serdang Regency, as many as 58 people. With the sampling technique using the total sampling technique because the total population is less than 100, then the entire population is used as a research sample

## RESULTS AND DISCUSSIONS

From the results of the study entitled "Factors Affecting the Occurrence of Anemia in Third Trimester Pregnant Women at Namorambe Health Center Deli Serdang Regency in 2022" With a distribution frequency with a sample of 58 people, the results obtained are as follows:

Based on the age of the third trimester pregnant women who are categorized as risky as many as 12 people (20.7%) and the age of the third trimester pregnant women who are not at risk as many as 46 people (79.3%). Based on the education of pregnant women in the third trimester, the incidence of anemia was in the elementary education category as many as 10 people (17.2%), junior high school education as many as 17 people (29.3%), high school education as many as 23 people (39.9%) and PT education as many as 8 people (13.8%). Based on the knowledge categorized as good knowledgeable as many as 28 people (48.2%), knowledgeable enough as many as 19 people (32.8%) and less knowledgeable as many as 11 people (19%). Based on parity, 12 people were categorized as having <2 children (20.7%) and mothers who had > 2 children were 46 people (79.3%).

**Table 1.** Test Results of Factors Affecting the Occurrence of Anemia in Third Trimester Pregnant Women

Variabel	Incidence Of anemia				Total		P value
	Anemia		No anemia		F	%	
	F	%	F	%			
age							
risky	4	6,8	8	13,7	12	20,7%	0,001
no risk	1	1,7	45	77,5	46	79,3%	
Education							
SD	2	3,4	8	13,7	10	17,2%	0,021
SMP	1	1,7	16	27,5	17	29,3%	
SMA	2	3,4	21	36,2	23	39,7%	
PT	0		8	13,7	8	13,8%	
Knowledge							
Baik	1	1,7	27	46,5	28	48,2%	

Cukup	1	1,7	18	31	19	32,8%	0,010
Kurang	3	5,1	8	13,7	11	19%	
Parity							
<2 anak	1	1,7	11	19 %	12	20,7%	0,038
>2 anak	4	6,8	42	72,4	46	79,3%	

Based on the table above, it shows that from 58 pregnant women in the third trimester, it was found that there were 12 women (20.7%) who had anemia, 4 (6.8%) and 8 people who did not have anemia (13.7%) while for mothers who have no risk of age as many as 46 people (79.3%) with 1 person experiencing anemia (1.7%) and 45 people (77.5%) who do not experience anemia with a  $p = 0.001 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted which means that there is an influence between maternal age and the incidence of anemia in third trimester pregnant women.

Mothers who have primary school education are 10 (17.2%) with 2 people who are anemic (3.4%) and 8 people who do not have anemia (13.7%), mothers who have junior high school education are 17 people (29.3%) with 1 person experiencing anemia (1.7%) and 16 people without anemia (27.5%), mothers with high school education as many as 23 people (39.7%) with experienced anemia as many as 2 people (13.4%) and 21 people (36.2%). experienced anemia as many as 8 people (13.7%) with  $p = 0.021 < 0.05$ , then  $H_0$  was rejected and  $H_a$  was accepted, which means that there is an influence between maternal education and the incidence of anemia in third trimester pregnant women.

Mothers who have good knowledge are 28 people (48.2%) with 1 person experiencing anemia (1.7%) and those who do not have anemia are 27 people (46.5%), mothers who have sufficient knowledge are 19 people (32.8%) with 1 person experiencing anemia (1.7%) and 18 people (31%), and mothers having less knowledge as many as 11 people (19%) with anemia as many as 3 people (5.1%) and 8 people who did not experience anemia (13.7%) with  $p$  value =  $0.010 < 0.05$ , then  $H_0$  was rejected and  $H_a$  was accepted which means that there is an influence between mother's knowledge and the incidence of anemia. In Third Trimester Pregnant Women.

Mothers with parity <2 children are 12 people (20.7%) with 1 person anemia (1.7%) and who do not have anemia are 11 people (19%) and mothers with parity >2 children are 46 people (79.3%) with 4 people experiencing anemia (6.8%) and 42 people not having anemia (72.4%) with  $p$  value =  $0.038 < 0.05$ , then  $H_0$  was rejected and  $H_a$  was accepted. it can be interpreted that there is an influence between maternal parity and the incidence of anemia in third trimester pregnant women.

## CONCLUSION

Based on statistical tests conducted with Chi-Square to determine the factors that influence the incidence of anemia in third trimester pregnant women, it shows that the  $p$  value =  $0.001 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted which means that there is an influence between maternal age and The incidence of anemia in third trimester pregnant women. Based on statistical tests conducted with Chi-Square to determine the factors that influence the incidence of anemia in third trimester pregnant women, it shows that the value of  $p = 0.021 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted which means that there is an influence between mother's education and The incidence of anemia in third trimester pregnant women. Based on statistical tests conducted with Chi-Square to determine the factors that influence the incidence of anemia in third trimester pregnant women, it shows that the value of  $p = 0.010 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted which means that there is an influence between mother's knowledge and The incidence of anemia in third trimester pregnant women. Based on statistical tests conducted with Chi-Square to determine the factors that influence the incidence of anemia in third trimester pregnant women, it shows that the  $p$  value =  $0.038 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted which means that there is an influence between maternal parity and The incidence of anemia in third trimester pregnant women. It is hoped that it can add insight for respondents to further increase knowledge about the Factors Affecting the Incidence of Anemia in Third Trimester Pregnant Women.

## References

- Ani, L. S. (2018). *Buku Saku : Anemia defisiensi besi masa prahamil dan hamil*. Jakarta: EGC.
- Dinkes Sumut. (2017). *Profil kesehatan Sumatera Utara tahun 2017*. Medan
- Fatmah. (2017). *Gizi usia lanjut*. Jakarta: Erlangga.
- Handayani, W., Haribowo, A.S. (2018). *Asuhan Keperawatan pada Klien dengan Gangguan Sistem Hematologi*. Jakarta: Salemba Medika.
- Kemenkes, 2018. *Profil Kesehatan Indonesia Tahun 2017*. Badan Penelitian dan Pengembangan Kementerian Kesehatan. Jakarta.
- Prawirohardjo, Sarwono, 2017. *Pelayanan Kesehatan Maternal dan Neonatal*, Jakarta : YBP – SP.
- WHO, 2018. *World Health Statistics 2018*. WHO.
- Tarwoto, Wasnidar. (2017). *Buku Saku : Anemia pada ibu hamil konsep dan penatalaksanaan*. Jakarta: Penerbit Buku Trans Info Media.
- Rochjati, H. P. (2019). *Strategi Pendekatan Risiko untuk Ibu Hamil oleh Ibu-ibu PKK dengan menggunakan Skor Perkiraan di Kabupaten Sidoarjo* (Skripsi). Fakultas Pertanian, Universitas Airlangga, Surabaya.
- Seto, S. (2018). *Buku 1 Asuhan kehamilan berbasis bukti*. Jakarta: Penerbit Sagung
- Sukaisi S. *Faktor-Faktor Yang Mempengaruhi Kejadian Anemia Pada Ibu Hamil Di Puskesmas Wirobrajan*. Jurnal Aisyiah. 2017
- Widyastuti, Yani. Rahmawati, 2018. *Kesehatan Reproduksi*. Yogyakarta : Fitramaya.
- Wiknosastro, 2019. *Ilmu Kebidanan*. Jakarta : Yayasan Bina Pustaka Sarwono Prawirohardjo.