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The Relationship Of Anemia During Pregnancy And The Incident Of Postpartum Bleeding At The Pratama Evi Clinic, Medan Marelan District, Medan City, North Sumatra, 2023

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Abstract. *The prevalence of postpartum anemia is quite large and the effect is significant in many places around the world,this problem has not received adequateattention even in developed countries (Garrido et al., 2017). This type ofresearch uses correlational descriptive with a cross sectional approach. The population in this study were 120 postpartum mothers. The sampling technique is to use the Accidental Sampling Technique. From the results of the study it was known that ofthe 30 postpartum mothers the majority were not anemic as many as 17 people (56.7%) and the minority anemia as many as 13 people (43.3%). Some of them, themajority who experienced Postpartum Bleeding were 16 people (53.3%) and a minority without Postpartum Bleeding were 14 people (46.7%). Based on the Chi Square statistical test, results were obtained where the p value was 0.000 (<0.05), sothat Ha was accepted, Ho was rejected, which means that there is a relationshipbetween anemia during pregnancyand the incidence of postpartum hemorrhage at Evi Primary Clinic in 2023. Based on the conclusions, it is hoped that mothers canadd insight especially for mothers giving birth to obey the midwife's recommendations so theycan anticipate the incidence of postpartum hemorrhage.*

Keywords*: Anemia During Pregnancy, Postpartum Bleeding.*

Abstrak. Prevalensi anemia postpartum cukup besar dan efeknya signifikan dibanyak tempat di seluruh dunia, masalah tersebut belum mendapat perhatian yang memadaibahkan dinegara maju (Garrido et al., 2017). Jenis penelitian ini menggunakan *deskriptif korelasional* dengan pendekatan *cross sectional*. Populasi dalam penelitian ini adalah sebanyak 120 orang ibu postpartum. Teknik pengambilan sampel adalah dengan menggunakan Teknik *Sampling Accidental*. Dari hasil penelitian diketahui bahwa dari 30 ibu postpartum mayoritas yang tidak Anemia sebanyak 17 orang (56,7%) dan minoritas Anemia sebanyak 13 orang (43,3%). Sebagian diantaranya mayoritasyang mengalami Perdarahan Postpartum sebanya16 orang (53,3%) dan minoritas Tidak Perdarahan Postpartum sebanyak 14orang (46,7%). Berdasarkan uji statistic *Chi Square* didapatkan hasil dimana *p value* 0,000 (<0,05), sehingga Ha diterima Ho ditolak yang artinya ada hubungan anemia pada saat kehamilan dengan kejadian perdarahan postpartum di Klinik Pratama Evi Tahun 2023. Berdasarkan kesimpulan Diharapkan kepada ibu dapat menambah wawasan khususnya para ibu bersalin mematuhi anjuran bidan sehinggadapat mengantisipasi kejadian perdarahan postpartum.

Kata Kunci: Anemia Pada Saat Kehamilan, Perdarahan Postpartum.

INTRODUCTION

The success of maternal health programs can be assessed through the main indicator Maternal Mortality Rate (MMR). According to the World Health Organization (WHO), every day around 810 women die due to pregnancy and childbirth (WHO, 2019). The number of maternal deaths in Indonesia in 2020 showed 4,627 deaths. This number shows an increase compared to 2019 of 4,221 deaths (RI Ministry of Health, 2021). In 2019, it showed that the maternal mortality rate was 202 out of 302,555 live births. The results of the Basic Health

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Research (Riskesdas) of North Sumatra Province in 2019 stated that the biggest cause of maternal death was bleeding at 31%, hypertension 24% infection 3%, circulatory system disorders 3%, metabolic disorders 2% and others (unsafe abortion, malnutrition, anemia, other diseases such as tuberculosis, heart disease, hepatitis, asthma, HIV etc.) 37% (Medan City Health Service, 2019).

Anemia in pregnant women is a health problem with a high incidence and complications can arise both in the mother and the fetus. More than 50% of pregnant women with anemia, and. causes morbidity and death of pregnant women (Achebe & Gafter-Gvili, 2016). Anemia in pregnancy can be confirmed when the maternal hemoglobin (Hb) number is 11 gr/dl based on standards determined by the World Health Organization (WHO). However, based on the definition from the American Center of Disease Control (CDC), anemia in pregnancy can be confirmed if the Hb level is ≤ 11 gr/dl in the 1st and 3rd trimesters, and/or 10.5 gr/dl in the 3rd trimester. 2 (Sultan, 2020).

Anemia in pregnancy can be caused by insufficient intake of iron, vitamin B12 and folic acid. Apart from that, it can also be caused by malabsorption or poor intestinal absorption of iron. Losing a lot of blood during childbirth, menstruation and other conditions can also result in a decrease in Hb levels which results in anemia. Anemia is one of the triggers for retained placenta, because the amount of oxygen bound in the blood is less, so the amount of oxygen sent to the uterus is less. This causes the uterine muscles to not contract adequately so that the placenta does not separate, resulting in postpartum bleeding.

Several studies have proven the relationship between anemia in pregnancy and postpartum events. Ariyanti (2022) in her research proved that pregnant women with anemia experienced a 11,253 times greater risk of bleeding during childbirth than women who gave birth vaginally. Mremi, et al (2022) show that the risk of anemia in postpartum women with an interval between the last two pregnancies of less than two years is around 18 times that of women with an interval of more than two years between the last two pregnancies. Nugroho, et al (2022) showed that there is a significant relationship between anemia in pregnancy and postpartum hemorrhage. Susilowati et al (2022) prove that there is a significant relationship between anemia in pregnancy and postpartum hemorrhage.

Pregnant women who experience anemia and it is not treated until the end of pregnancy will have an impact during delivery, which can cause post-partum bleeding. Anemia in pregnant women increases the risk of postpartum hemorrhage, if anemia occurs early in pregnancy it can result in premature labor. From the above background, researchers conducted research on the relationship between anemia during pregnancy and the incidence

of postpartum hemorrhage.

THEORETICAL STUDY

Definition of Anemia in Pregnancy

Anemia is a condition in which a mother has a hemoglobin (Hb) level in her blood of less than 12 gr%. Meanwhile, anemia in pregnancy is a mother's condition with hemoglobin levels below 11 gr% in the first and third trimesters or levels < 10.5 gr% in the second trimester II. The incidence of anemia or lack of blood in pregnant women in Indonesia is still relatively high, namely 48.9% (according to the Indonesian Ministry of Health in 2019).

Definition of Postpartum Hemorrhage

The World Health Organization defines postpartum hemorrhage as blood loss ≥ 500 ml within 24 hours after giving birth (Dept. of Reproductive Health and Research, 2012). Postpartum bleeding can be identified as the source of the bleeding coming from the placental implantation site (placenta previa), laceration of the genital tract, or both occurring simultaneously. There is an alternative definition which states that postpartum hemorrhage is blood loss ≥ 500 ml in vaginal delivery or ≥ 1000 ml in caesarean section surgery (Brenner et al., 2019)

The hypothesis in this study is that there is a relationship between anemia during pregnancy and the incidence of postpartum hemorrhage at Pratama Evi Clinic in 2023.

METHODS

This type of research uses descriptive correlational. The population in this study was all 120 postpartum mothers at the Pratama Evi Clinic in February - May 2023. Accidental Sampling is a technique for determining samples based on chance, if it is deemed that the people you meet are suitable. Thus, the sample in this study was 120 x 25% = 30 respondents. Primary data collection techniques consisting of name, age, education and parity are obtained through filling in, after completing all the questions, the questionnaire is collected again to check the completeness of the respondent's answers, the answers that have been filled in completely are immediately collected and secondary data is through data obtained from notes. patient visit history. Data analysis used in this research includes univariate analysis and bivariate.

RESULT AND DISCUSSION

Univariat Analysis

Table 4. Distribution of Respondent Characteristics Based on Age at the Clinic Evi Primary in 2023

No	Age	Frequency	Percentage (%)
1.	< 20 Years	11	36,7
2.	20 – 35 Years	17	56,7
3.	> 35 Years	2	6,6
	Total	**30**	**100**

Based on the research results in table 4 above, it shows the frequency distribution of respondents based on age, the majority of respondents aged 20 - 35 years were 17 people (56.7 % and the minority of respondents > 35 years were 2 people (6.6 %).

Table 5. Distribution of Respondent Characteristics Based on Education at Evi Pratama Clinic in 2023

N0	Education	Frequency	Percentage (%)
1.	SD / SMP (Low) SMA	9	30
2.	(Middle) D-III/ S-1 (High)	17	56,7
		4	13,3
	Total	**30**	**100**

Based on the research results in table 5 above, it shows the frequency distribution of respondents based on education, the majority of respondents have a high school (secondary education) as many as 17 people (56%) and the minority of respondents with D-llll / S-1 (High) education were 4 people (13.3%), respondents with D-llll / S-1 (High) education were 4 people (13, 3%)..

Table 6. Distribution of Respondent Characteristics Based on Parity at Pratama Evi Clinic in 2023

No	Parity	Frequency	Percentage (%)
1.	Primigravida	14	46,7
2.	Multigravida	16	53,3
	Total	**30**	**100**

Based on the research results in table 6 above, it shows that the distribution of respondents based on parity is that the majority are 16 multigravidas (53.3%) and 14 primigravida minorities (45.7%).

Table 7. Frequency Distribution of Anemia During Pregnancy at Pratama Evi Clinic in 2023

No	Anemia During Pregnancy	Frequency	Percentage (%)
1	Anemia	13	43,3
2	Not Anemia	17	56,7
	Total	**30**	**100**

Based on the research results in table 7 above, it can be seen that the majority of respondents were not anemic, 17 people (56.7%) and the minority were 13 people (43.3%) with anemia..

Table 8. Frequency Distribution of Postpartum Hemorrhage at Pratama Evi Clinic in 2023

No	Postpartum Hemorrhage Incidence	Frequency	Percentage (%)
1	Postpartum Hemorrhage	16	53,3
2	No Postpartum Bleeding	14	46,7
	Total	**30**	**100**

Based on the research results in table 8, it can be seen that the majority of respondents had Postpartum Bleeding as many as 16 people (53.3%) and the minority did not have Postpartum Bleeding as many as 14 people (46.7%).

BIVARIAT ANALYSIS

Table 9. Frequency Distribution of the Relationship between Anemia During Pregnancy and Postpartum Hemorrhage at Pratama Evi Clinic in 2023

		Postpartum Hemorrhage					
No	**Anemia During Pregnancy**	**Bleeding**		**Not Bleeding**		**Amount**	
		N	**%**	**N**	**%**	**F**	**%**
1	Not Anemia	13	43,3	0	0	13	43,3
2	Anemia	3	10	14	46,7	17	56,7
	Total	**16**	**53,3**	**14**	**46,7**	**30**	**100**

It can be seen that the majority of births at the Pratama Evi Clinic were known to experience postpartum hemorrhage with anemia below 11gr%, namely 13 people (43.3%), of whom there were no postpartum hemorrhage giving birth with anemia above 11gr%, namely 3 people (10%) . Based on the Chi Square statistical test, results were obtained where the p value was 0.000 (<0.05), so H1 was accepted. H0 was rejected, meaning there was a relationship between knowledge of anemia during pregnancy and Postpartum Hemorrhage at Pratama Evi Clinic in 2023.

Based on table 9, it can be seen that the majority of births at the Pratama Evi Clinic were known to experience postpartum hemorrhage with anemia below 11gr%, namely 13 people (43.3%), of whom there were no postpartum hemorrhages giving birth with anemia above 11gr%, namely 3 people (10%). Based on the Chi Square statistical test, the results were obtained where the p value was 0.000 (<0.05), so that H1 was accepted. H0 was rejected, meaning there was a knowledge relationship between anemia during pregnancy and postpartum hemorrhage at Pratama Evi Clinic in 2023.

Postpartum Hemorrhage at Pratama Evi Clinic in 2023.

Based on table 9, it can be seen that the majority of births at the Pratama Evi Clinic were known to experience postpartum hemorrhage with anemia below 11gr%, namely 13 people (43.3%), of whom there were no postpartum hemorrhages giving birth with anemia above 11gr%, namely 3 people (10%). Based on the Chi Square statistical test, the results were obtained where the p value was 0.000 (<0.05), so that H1 was accepted. H0 was rejected, meaning there was a knowledge relationship between anemia during pregnancy and postpartum hemorrhage at Pratama Evi Clinic in 2023.

CONCLUSION

Based on the results of this research regarding the relationship between anemia during pregnancy and the incidence of postpartum hemorrhage at Pratama Evi Clinic in 2023, it can be concluded that the majority of respondents were not anemic, 17 people (56.7%) and the minority were 13 people (43.3%). The majority of respondents had postpartum hemorrhage, 16 people (53.3%) and the minority did not have postpartum hemorrhage, 14 people (46.7%). There was a significant relationship between anemia during pregnancy and the incidence of postpartum hemorrhage.It is hoped that the results of this research will increase insight, especially for mothers giving birth, to comply with midwives' recommendations so that they can anticipate the incidence of postpartum hemorrhage.

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