



# (THE RELATIONSHIP BETWEEN ANEMIA IN MATERNAL BIRTH AND POSTPARTUM HAEMORRHAGEAT BPM BETTI HERAWATI JAMBI IN 2023)

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#### **ABSTRACT**

(Title: The Relationship between Anemia in Maternal Birth and Post Partum Hemorrhage at BPM Betti Herawati Jambi in 2023.)

**Background:** Postpartum hemorrhage is the most common cause of all deaths from obstetric bleeding. Postpartum hemorrhage is bleeding that exceeds 500 ml after the baby is born in vaginal delivery and exceeds 1000 ml in Caesarean section. The purpose of this study was to determine the relationship between anemia in women giving birth and postpartum hemorrhage at BPM Betti Herawati Jambi in 2023.

**Method:** this type of research is a research design that is used in research is to maximize a control of several factors that can affect the validity of a result. The sampling technique used in this research is purposive sampling technique. The sampling technique is taken by total sampling, amounting to 36 people. respondent. Data collection uses secondary data, namely by using patient registration book sources and medical records at BPM Betti Herawati Jambi. Data analysis used was univariate analysis with percentages and bivariate with the Chi-Square test

**Results:** Univariate analysis The results of the research that was conducted on 36 respondents obtained the majority of respondents who experienced non-anemic 17 people (47.2%), who experienced Anemia of the minority 19 people (52.8%). Postpartum hemorrhage the majority 17 people (47.2) %). The minority who did not experience postpartum hemorrhage were 19 people (52.8%). Bivariate analysis concluded that of the 15 respondents (10.4%) who experienced anemia with no postpartum hemorrhage, anemia was found in 4 respondents (8.6%) who are bleeding

postpartum, No Anemia found 4 respondents (6.6%) who did not bleed postpartum and No Anemia obtained 13 Respondents (5.4%) who experienced Postpartum Bleeding.

**Conclusion:** from the study it can be concluded that there is a relationship between Anemia and Postpartum Bleeding at BPM Betti Herawati Jambi in 2023 (p-value 0.001%).

**Keywords:** anemia in women giving birth with postpartum hemorrhage.





#### INTRODUCTION

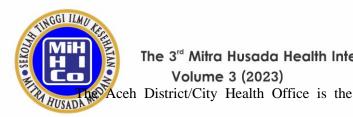
Pregnancy with anemia is a potential danger to mother and child or potentially dangerous for mother and baby. The prevalence rate of anemia in pregnant women globally is estimated at 41.8% and in developing countries 40% of maternal deaths are related to anemia in pregnancy (World Health Organization (WHO), 2011). Data from the Ministry of Health of the Republic of Indonesia (Kemenkes, 2018) states that there has been an increase in the prevalence rate of anemia in pregnant women in Indonesia, namely to 48.9%.

WHO data (2017) regarding the status of National Health in achieving the target of the Sustainable Development Goals (SDGs) states that globally around 830 women die every day due to complications during pregnancy and childbirth, with an MMR rate of 216 per 100,000 live births. As many as 99% of maternal deaths due to problems during pregnancy, childbirth or childbirth occur in developing countries. The MMR ratio is still considered quite high as targeted to be 70 per 100,000 live births in 2030 (WHO, 2017). The SDGs or Sustainable Development Agenda is

a global agreement containing 17 goals, one of

the goals of the SDGs is to reduce the maternal mortality rate to below 70 per 100,000 live births and to reduce the neonatal mortality rate to 17 per 1,000 live births. (Ministry of Health RI, 2016). The maternal mortality rate in Indonesia is still very high considering the target of the Sustainable Development Goals (SDGs) in 2030 to reduce the maternal mortality rate to below 70 per 100,000 live births (Ministry of Health RI, 2015). Meanwhile, based on the 2015-2019 RPJMN (Medium Term Development Plan), the target for maternal mortality in 2019 is 306 per 100,000 live births (BAPPENAS, 2014).

North Sumatra is one of the provinces that has the highest maternal mortality rate, in 2014 there were 276 cases of maternal death consisting of 72 cases during pregnancy, 128 cases during childbirth and 76 cases during childbirth (North Sumatra Health Profile, 2014). According to the maternal mortality rate in North Sumatra Province, 80% are caused by bleeding (25%), hypertension in pregnancy (12%), obstructed labor (8%), complications of unsafe abortion (13%) and other causes (7%).



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bleeding that exceeds 500 ml after the ba

born in vaginal delivery and exceeds 1000 ml

number of reported maternal deaths of 141

cases and 101,296 live births, so the ratio of maternal mortality in Aceh again shows a decrease to 139 per 100,000 live births. Where the largest area contributed to maternal mortality, namely Pidie Regency with 16 cases, followed by Bireuen and North Aceh with 13 cases, as well as other districts/cities where the number of maternal deaths was between 1 and 11 cases (Jambi Province Health Profile 2018).

Anemia has several harmful effects on pregnant women and their babies. The impact of anemia is abortion, premature labor, inhibition of fetal growth and development in susceptibility the uterus, infection, antepartum bleeding, premature rupture of membranes, during labor can cause his disturbances, the first stage of labor can last a long time, sub involution occurs during the puerperium, facilitating puerperium infection, and reduced production of breast milk (ASI) (Arantika and Fatimah, 2019).

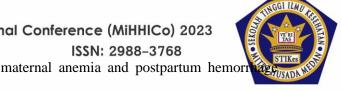
Postpartum haemorrhage is the most common cause of all deaths from obstetric haemorrhage. Postpartum hemorrhage

in cesarean section (Chunningham, 2012). Risk factors for postpartum hemorrhage include age, parity, large fetus, history of previous bad births, severe anemia, multiple pregnancies, hydramnios, prolonged labour, precipitous labour, wrong handling in stage III, hypertension in pregnancy, uterine abnormalities, uterine infections, surgical intervention. operative with too deep anesthesia (Lestrina, 2012).

Even if a woman survives after experiencing postpartum hemorrhage, she will suffer from severe blood shortages (severe anemia) and will experience prolonged health problems (Ministry of Health, 2015). The three most common causes of maternal death infection, preeclampsia and bleeding. Postpartum hemorrhage causes maternal deaths that occur in the first 24 hours after the baby is born, 68-73% of maternal deaths within one week after the baby is born, and 82-88% of maternal deaths within two weeks after the baby is born (Karkata, 2013). Postpartum hemorrhage causes maternal death, which is 25% of maternal deaths in the world



Based on research conducted by



Wuryanti, Ayu (2011) The relationship at BPM Betti Herawati Jambi in 2023?

between anemia in pregnancy and postpartum hemorrhage due to uterine atony in Wonogiri Hospital. The results showed that there was a relationship between anemia in pregnancy and postpartum hemorrhage due to uterine atony using the p value of the Fischeman test statistic, p value <0.05, so there was a relationship between the two variables. And also a study conducted by Rosmiyati, (2015) The Relationship between Anemia Pregnant Women and Postpartum Hemorrhage During Delivery. The results of the study showed that there was a relationship between anemia during pregnancy and bleeding during childbirth with a p value = 0.000. And research conducted by Maharani, Titi (2010) The relationship between age, parity and the incidence of primary postpartum hemorrhage at BPS Leny Kurniasari.

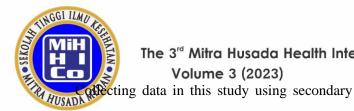
Based on what the researchers did, there were 36 birth mothers who experienced anemia and 19 birth mothers did not experience anemia. And it will be known whether anemic mothers experience postpartum hemorrhage, therefore researchers are interested in further discussing whether or not there is a relationship between

#### **METHOD**

Research design is vital in research that allows maximizing the control of several factors that can affect the validity of a result, The research conceptual framework is a conceptual mode that relates to how a researcher constructs a theory or connects logically several factors that are considered important to the problem

The population in this study were all birth mothers totaling 63 people from January to May 2023.

The sample is part or representative of the research and is considered represent entire population being studied. The sample in this study was 36 samples. The sampling technique used in this research purposive sampling technique. Purposive sampling is a sampling technique with certain considerations. Based on inclusion and exclusion criteria.



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relationship between anemia and postpa

hemorrhage found that out of 15 respondents

#### data. Researchers collected data on the

dependent variable and independent variables needed by using registration book sources and patient medical records at BPM Betti Herawati Jambi in 2023. Researchers took sample data that met the inclusion and exclusion criteria.

After collecting, managing and analyzing the data obtained, the results of the research that the author obtained regarding "The Relationship of Anemia in Maternal Birth and Postpartum Bleeding at BPM Betti Herawati, Merangin Regency, Jambi, 2023", obtained data on the number of respondents 36 pregnant women with the following results:

#### RESULT AND DISCUSSION

Based on the results of the study, Ho was rejected and Ha was accepted, so there was a relationship between anemia and postpartum hemorrhage. From the results of research conducted on the relationship between anemia and postpartum hemorrhage at BPM Betti Herawati in 2023, the discussion is as follows.

Based on the results of the research conducted, it was known from 36 respondents. The results of the study regarding the (10.4%) who experienced anemia with no occurrence of postpartum hemorrhage, anemia was found in 4 respondents (8.6%) who experienced postpartum hemorrhage,

anemia found 4 respondents (6.6%) who did not have postpartum hemorrhage and no

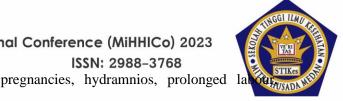
anemia obtained 13 respondents (5.4%) who

experienced postpartum hemorrhage.

Based on the results of the research conducted, it was known from 36 respondents. The results of the study regarding the relationship between anemia and postpartum hemorrhage found that out of 15 respondents (10.4%) who experienced anemia with no occurrence of postpartum hemorrhage, anemia was found in 4 respondents (8.6%) who experienced postpartum hemorrhage, anemia found 4 respondents (6.6%) who did not have postpartum hemorrhage and no anemia obtained 13 respondents (5.4%) who experienced postpartum hemorrhage.

Pregnancy with anemia potential danger to mother and child or potentially dangerous for mother and baby. The prevalence rate of anemia in pregnant women globally is estimated at 41.8% and in





weloping countries 40% of maternal deaths

are related to anemia in pregnancy (World

Health Organization (WHO), 2011). Data from the Ministry of Health of the Republic of Indonesia (Kemenkes, 2018) states that there has been an increase in the prevalence rate of anemia in pregnant women in Indonesia, namely to 48.9%.

Anemia has several harmful effects on pregnant women and their babies. The impact of anemia is abortion, premature labor, inhibition of fetal growth and development in the uterus, susceptibility to infection, antepartum bleeding, premature rupture of membranes, during labor can cause his disturbances, the first stage of labor can last a long time, sub involution occurs during the puerperium, facilitating puerperium infection, and reduced production of breast milk (ASI).

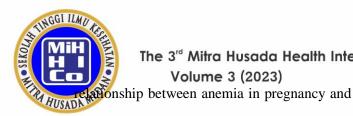
Postpartum haemorrhage is the most common cause of all deaths from obstetric haemorrhage. Postpartum hemorrhage is bleeding that exceeds 500 ml after the baby is born in vaginal delivery and exceeds 1000 ml in cesarean section (Chunningham, 2012). Risk factors for postpartum hemorrhage include age, parity, large fetus, history of previous bad births, severe anemia, multiple

precipitous labour, wrong handling in stage III,

hypertension in pregnancy, uterine abnormalities, uterine infections, surgical intervention. operative with too deep anesthesia (Lestrina, 2012).

Even if a woman survives after experiencing postpartum hemorrhage, she will suffer from severe blood shortages (severe anemia) and will experience prolonged health problems (Ministry of Health, 2015). The three most common causes of maternal death infection. preeclampsia and bleeding. Postpartum hemorrhage causes 45% maternal deaths that occur in the first 24 hours after the baby is born, 68-73% of maternal deaths within one week after the baby is born, and 82-88% of maternal deaths within two weeks after the baby is born (Karkata, 2013). Postpartum hemorrhage causes maternal death, which is 25% of maternal deaths in the world (Kramer et al, 2013).

Based on research conducted by Wuryanti, Ayu (2011) The relationship between anemia in pregnancy and postpartum hemorrhage due to uterine atony in Wonogiri Hospital. The results showed that there was a



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Tabel 1. The Relationship between Anemia and Postpartum Hemorrhage at BPM Betti Herawati in 2023

no			
1	anemia	respondents (10.4%)	4 respondents (8.6%)
2	Postpartum hemorrhage	4 respondents (6.6%)	respondents (5.4%)
	Jumlah	202	36

## Frequency Distribution of Respondents **Based on Anemia**

The results of the research that was conducted on 36 respondents showed that the majority of respondents who were not anemic were 17 people (47.2%), and those who had anemia were a minority of respondents who were 19 people (52.8%).

## **Distribution of Respondents** Frequency **Based on Postpartum Hemorrhage**

The results of the research that was conducted on 36 respondents showed that the majority of respondents who had postpartum hemorrhage were 17 people (47.2%), and the minority of respondents who did not have postpartum hemorrhage were 19 people (52.8%).



hemorrhage at BPM Betti Herawati.

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iwariate Analysis

following conclusions can be drawn:

The Relationship between Anemia and Postpartum Hemorrhage at BPM Betti Herawati in 2023

The results of the study regarding the relationship between anemia and postpartum hemorrhage found that out of 15 respondents (10.4%) who experienced anemia without postpartum hemorrhage, anemia was obtained by 4 respondents (8.6%) who experienced postpartum hemorrhage, not anemia, 4 respondents (6 .6%) who did not have postpartum hemorrhage and were not anemic, got 13 respondents (5.4%) who experienced postpartum hemorrhage.

Analysis of Chi Square Anemia with Postpartum Hemorrhage

It can be concluded that there is a statistically significant relationship between knowledge and antenatal care adherence. The data are normal so no other tests are needed.

#### **CONCLUSION**

After conducting research on the relationship between anemia in childbirth and postpartum

Distribution of the frequency of anemia in third trimester pregnant women from 36 respondents, it was obtained that the majority of respondents who experienced anemia were 19 people (52.8%), and those who were not anemic were a minority of respondents who were 17 people (47.2%).

Distribution of the frequency of postpartum hemorrhage from 36 respondents, it was found that the majority of respondents did postpartum hemorrhage, not have amounting to 19 people (52.8%), and the minority of respondents who experienced postpartum hemorrhage amounted to 17 people (47.2%)

There is a relationship between anemia and postpartum hemorrhage in mothers giving birth at BPM Betti Herawati Jambi, the value (P) is 0.001 (p <0.05) with the result  $X^2$ count = 11,056

#### REFERENCES

Mochtar, R. 2012 Synopsis of Obstetrics: Obstetric Physiology, Obstetrics Pathology Volume 1. Jakarta: EGC Medical Book.



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relationship between patient characteristics

Ramadhani NP, Sukarya WS, 2011.

#### Family Planning. Jakarta: EGC

Nursalam. 2013. Nursing Science Research Methods. South Jakarta: Salemba Medika.

Pusdiknakes, 2013. Midwifery Care Concept. Jakarta:Pusdiknaskes.

Prawirohardjo. 2011. Midwifery. Jakarta: PT. Bina Pustaka

POGI, 2016. Definition, classification and diagnosis. In: National guidelines for postpartum haemorrhage medical services. Jakarta: POGI. page 7

Queensland Clinical Guidelines, Aetiology. Primary postpartum In: haemorrhage. Queensland: Queensland Government. pp 8-9

Rosmiyati. (2015). Relationship Anemia Pregnant Women and Postpartum Hemorrhage During Delivery. Journal of Midwifery Vol. 1 No. July 2, 2015: 77-80.

Rukiyah and Yulianti, 2011. Midwifery Care IV (Obstetric Pathology). Jakarta: Trans Info Media.

and the incidence of retained placenta in patients treated at Al-Ihsan Hospital Bandung for the period 1 January 2010- 31 December 2010. Proceedings of SnaPP2011 Science, Technology and Health. 2(1):25-32.

Sustainable Development Goals SDGs (2017). SDGs Health Indicators in Indonesia.

Saleha, S. (2014) Midwifery Care During the Postpartum Period. New York: Salemba Medika.

Saifuddin, A.B. (2012) National Reference Book for Maternal and Neonatal Health Services, Edition I, Print II. Jakarta: YBP-SP.

Sugiyono. (2017).Quantitative Research Methods, Qualitative, and R&D. Bandung: Alphabet.CV.

Smith JR, Ramus RM. 2018. Postpartum haemorrhage. The VeterinaryJournal. (1900) 82:2256

Republic of Indonesia Ministry of Health. Indonesia Health Profile 2014. Jakarta: Ministry of Health RI; 2015.





coatmojo, S. 2012 Obstetrics. Jakarta: PT.

#### RinekaIpta

Wijaksastro, H. 2012. National Reference

Book for Maternal and Neonatal Services.

Jakarta: Yayasan Bina Pustaka Sarwono.

World Health Organization (WHO) 2014.

Commission on Ending

Childhood Obesity. Geneva, World Health

Organization, Department of

Non-communicable disease surveillance.

WHO, (2014). Maternal Mortality Rate.

http://www.who.int/mediacentre

Wuryanti, Ayu (2011) The Relationship between Anemia in Pregnancy and Postpartum Hemorrhage Due to Uterine Atonia in Wonogiri Hospital: 2010. Accessed on June 10, 2012.

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