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# Factors That Influence The Incidence Of Retained Placenta Lanto Dg.Pasewang Hospital Jeneponto

**Nur Ismi Wahyuni**
[1]*Midwifery Of STIKes Abdi Nusantara Jakarta,Indonenesia*
*Corresponding author: chimmydazure@gmail.com*

## ABSTRACT

Background: Placental retention is one of the causes of the risk of bleeding that occurs immediately after delivery compared to other risks for mothers in labour, postpartum hemorrhage due to retained placenta is a life-threatening cause where mothers with heavy bleeding will die quickly if they do not receive treatment. proper medical. Purpose: This study aims to determine the factors that influence the occurrence of retained placenta in women giving birth at RSUD. Lanto Dg. Pasewang Jeneponto. Research methods; This study uses a quantitative descriptive. The population in this study were all patients diagnosed with retained placenta at Lanto Dg Hospital. Pasewang Jeneponto in January - October 2022, namely 50 people. The sampling technique was purposive sampling. The method of data collection in this study was secondary data, namely if the desired data collection was obtained from other people or other places and was not carried out by the researchers themselves where in this study the researchers recorded the register number of patients with retained placenta obtained from the register book in the treatment room or medical record. Then take the patient's status on the medical record at Lanto Dg Hospital. After that, Pasewang collected data and selected complete data based on the specified criteria. Data were analyzed using chi-square.

Keywords: Placental Retention,labor

## Introduction

The degree of maternal and infant health is the main focus in midwifery services. World Health Organization (WHO) data for 2017 found that the maternal mortality rate occurred in low and lower middle-income countries as much as 94%. In the same year, 810 women died as a result of pregnancy and childbirth, with cases of death whose causes could be prevented by early detection of complications that might occur (WHO, 2017).The target of the Sustainable Development Goals (SDGs) is to increase the rate of reduction in maternal mortality in 2030 to less than 70 per 100,000 live births, where deaths due to retained placenta have an incidence of 0.8-12% for each birth (WHO, 2017).

The distribution of maternal mortality in ASEAN countries is recorded as Indonesia being the country with the highest maternal mortality rate of 305/100,000 live births. Meanwhile, Singapore is an ASEAN country with the least maternal mortality rate, namely 7/100,000 live births. Laos is the second ASEAN country with the highest maternal mortality rate after Indonesia with 357/100,000 live births. Followed by the Philippines, Myanmar, Cambodia, Vietnam, Brunei Darussalam, Thailand and Malaysia (ASEAN, 2017).

One indicator of the success of efforts to improve maternal health status is the maternal mortality rate. The maternal mortality rate based on inter-census population survey data (SUPAS) shows 305/100,000 live births in 2015 to 2019. Labor complications such as bleeding and retained placenta were found to be 40% to 60% being the main contributor to the high maternal mortality rate in Indonesia (Ministry of Health , 2018). Various cases of labor complications and complications experienced by most of the mothers led to death, namely bleeding 28% and hypertension 23%, this was recorded in data from the South Sulawesi provincial health office for 2021 (Sulselprov, 2022).

One of the causes of maternal death in developing countries like Indonesia is postpartum hemorrhage which reaches 25% of all maternal deaths (Simanjuntak, 2020). The delivery process is said to be pathological if the amount of blood that comes out is more than 500 cc in 24 hours and this case is said to be postpartum hemorrhage according to (Poggi, 2013). Placental retention is one of the most common causes of primary postpartum hemorrhage, which occurs in the first 24 hours after delivery (Saifuddin, 2008).

Among the various risks of complications of childbirth, retained placenta and medical care that is not given quickly and precisely is one of the causes of postpartum hemorrhage which not least results in maternal death. The incidence of retained placenta was found to be 1.8% due to bleeding based on research conducted by (Satriyandari, Yekti, & Hariyati, 2021).Placental retention occurs for a number of reasons, one of which is the higher the parity, the higher the risk of retained placenta. Research with variable parity states that the higher the parity, the higher the risk of retained placenta. The results of this study are in line with research conducted by Rukaiyah that parity has an influence on the incidence of retained placenta with a p value of 0.014. The higher the number of parity mothers, the higher the risk of the mother experiencing retained placenta during childbirth due to a decline in endometrial function (Arifin, 2022).

Based on research conducted by Rahmadhani, the most cases (31.6%) were aged ≥35 years, (71.3%) had parity ≥2, and (94.9%) had no history of cesarean section in previous deliveries. There was a significant relationship between age and parity and the incidence of retained placenta with p values of 0.002 each with OR 3.696 (95% CI 1.593-8.577) and 0.038, OR 1.870 (95% CI 1.034-3.384). Furthermore, the factor of history of cesarean section in previous deliveries is not related to the incidence of retained placenta (Ramadhani & S.S., 2020)According to the results of a survey at Lanto Dg. Pasewang Jeneponto noted that the number of patients with retained placenta, namely: in 2018 cases of retained placenta there were 49 cases (5.3%) per 924 normal deliveries, in 2019 cases of retained placenta there were 54 cases (6.1%) per 892 normal deliveries and years 2020 cases of retained placenta 58 cases (4.8%) per 1200 normal deliveries, in 2021 cases of retained placenta 55 cases (7.1%), and in 2022 January - October as many as 50 cases (6.4%) per 780 deliveries normal.

## Methods

This research is a quantitative descriptive study with a purposive sampling design to determine the factors and influences that affect retained placenta in postpartum mothers, where the independent variables and the dependent variables are measured simultaneously.The sample for this study was determined based on the Slovin formula. The

author chooses to contemplate clusters of cases, ie. based on these criteria which has the effect of frozen placenta at Lanto Dg Pasewang General Hospital, Jeneponto and has complete data for the variables studied with the criteria set by the author. In this study, secondary data is used as a data collection method, ie. If the desired data collection is obtained from other people or other places and is not carried out by the researchers themselves, then the researchers who participated in this research are already included in the data collection register. patients with retained placenta. obtained from medical records or health reports. Then in 2022 an extract of patient status will be carried out from the medical records of RSU Lanto Dg Pasewang Jeneponto. Then, extract the data and select the complete data based on the specified criteria and univariate analysis using the chi-square statistical test. The data is presented in the form of a frequency distribution table, then it is multiplied or interpreted systematically and chronologically based on the problems to arrive at research conclusions.

## 1. Results

Results of Univariate Analysis

**1. Table 5.1 Distribution of Frequency Characteristics of Patients with Retention of Placenta By Age**

| No | Age | frequency | Percentage (%) |
|---|---|---|---|
| 1 | <20 years | 3 | 7,9 |
| 2 | | 12 | 31,6 |
| 3 | 21-29 | 8 | 21,0 |
| 4 | 30-34 years | 15 | 39,5 |
| | >35 years | 38 | 100% |

Table 5.1 shows cases of retained placenta in mothers who gave birth at Lanto DG Hospital. Pasewang Jeneponto in 2022 shows that most of the respondents aged >35 years were 15 people (39.5%), 21-29 years were 12 people (31.6%) almost half of the incident, aged 30-34 years 8 people (21 .0%), and the age of less than 20 years as many as 3 people (7.9%) is a small part of the incident. **Table 5.2 Distribution of Frequency Characteristics of Patients with Retention of Placenta Based on Birth Distance**

| No | Birth Distance | Frequency | Percentage (%) |
|---|---|---|---|
| 1 | Birth First | 12 | 31,6 |
| 2 | <2 years | 8 | 21,05 |

| | | | |
|---|---|---|---|
| 3 | 2-5 years | 16 | 42,1 |
| 4 | >5 years | 2 | 5,26 |
| | Amount | 38 | 100% |

Table 5.2 shows that the majority of respondents had an interval of 2-5 years between births of 16 people (92.1%) and a small proportion had an interval of >5 years between births of 2 people (5.26%).

**Table 5.3 Distribution of Frequency Characteristics of Patients with Retention of Placenta Based on the incidence of anemia**

| No | Anemia Incidence | frequency | Percentage(%) |
|---|---|---|---|
| 1 | Normal | 14 | 36,8 |
| 2 | Mild anaemia | 3 | 7,9 |
| 3 | | 15 | 39,4 |
| 4 | Moderate anemia | 6 | 15,8 |
| | Severe anemia | 38 | 100% |

Table 5.3 shows that most of the respondents had anemia, while as many (39.4%) had moderate anemia while a small number or 3 people (7.9%) had mild anemia.

Results of Bivariate Analysis

**Table 5.4 Relationship between age, spacing between births, the incidence of maternal anemia and the incidence of retained placenta**

| **Results** | **Placenta Retention** | | | |
|---|---|---|---|---|
| | Ya | | Tidak | |
| | n | % | n | n % |
| **Umur** | | | | |
| **<20yrs** | 3 | 7,9% | - | - |
| **21-29 years** | 12 | 31,6 % | - | - |
| **30-39 yrs** | 8 | 21 % | - | - |
| **>35 years** | 15 | 39,5% | - | - |
| **Total** | 38 | 100% | - | - |
| **Distance between births/delivery** | | | | |
| **Child birth 1** | 12 | 31,6% | - | - |
| **<2 years** | 8 | 21,% | - | - |
| **2-5 years** | 16 | 42,1% | - | - |
| **>5 years** | 2 | 5,3% | - | - |
| **Total** | 38 | 100% | - | - |
| **Anemia events** | | | | |
| **Normal** | 14 | 36,8% | - | - |

| | | | | |
|---|---|---|---|---|
| **Mild anemia 10-10.9 gr/dl** | 3 | 7,9% | - | - |
| | 15 | 39,4% | - | - |
| **Moderate anemia 7-9.9 gr/dl** | 6 | 15,8% | - | - |
| **Severe anemia < 7 gr/dl** | | | | |
| **Total** | 34 | 100% | - | - |

Based on the results of table 5.4 above, it can be seen that the factors of age, spacing between births, and the incidence of anemia have a relationship with the incidence of retained placenta. all respondents experienced retained placenta which is a constant result because there were no cases without retained placenta.

**DISCUSSION**

**A. Age characteristics with retained placenta**

In 2022 at the Hospital. Lanto Dg.Pasewang Jeneponto recorded the incidence of mothers who experienced retained placenta over the age of 35 years. At the Hospital. Lanto Dg.Pasewang Jeneponto in 2022 most of them give birth with a status of age that is no longer young, namely 35 years, reaching 39.5%. Age 35 and over have a 7 to 10 times higher risk of experiencing a retained placenta (Mayasari, 2021). The risk of retained placenta doubles in people aged 35 years and over (Intiyaswati & Pramesti, 2021).Age 35 and over is a risk factor for mothers who can increase the risk of perinatal and maternal mortality. This is in accordance with the theory that mothers who are under 19 years and over 35 years have higher risk factors. Age is a risk factor for bleeding that can cause maternal death. This is because the age of pregnant women is associated with the quality of the retained placenta or differences in angiogenesis which increases the risk of retained placenta (Yorry Decjuwiyan, 2021)Yaumil Indah's research suggests that the age factor in high-risk mothers, the elderly, can cause regulation of uterine muscle contractions and interfere with the process of releasing the placenta from the uterine wall. In addition, as the mother ages, progressive decay of the endometrium occurs, requiring a wider placenta to meet the nutritional needs of the foetus, the placenta widens for implantation, and the chorionic villi become the uterus and penetrate deeper into the wall so that the adhesive placenta occurs for training (Istiasih, Aini, & Dewi, 2021) Karakteristik Jarak Antar Kelahiran dengan Kejadian Retensio Plasenta

Most of the mothers gave birth with retained placenta at Lanto Dg Hospital. Pasewang Jeneponto in 2022 most of the respondents were small, with 16 (42.1%) birth spacing between the ages of 2 and 5 and 8 (21.05) birth spacing under 2 years of age. The proportion was 2 (5.26%), with an interval of more than 5 years. The results of this study are not in accordance with the existing theory. Theoretically, a short gestation interval or an interval of less than 2 years is one of the factors that influence the development of placenta accreta. This is because the contractions weaken so that the placenta remains in the uterine cavity. The risk of placenta

accreta also occurs in deliveries that are more than 10 years apart. In this condition, the smooth muscles of the uterus become stiff, uterine contractions worsen as when faced with other early labor pains, and a retained placenta is more likely to occur (Permatasari, 2018).

In the space between the birth of the mother to the youngest child under the age of two, the physical and uterine health of the mother still requires sufficient rest. Because the mother is still weak, bleeding such as retained placenta and complications of delivery can occur. Meanwhile, within more than 10 years, it is as if the mother is facing her first pregnancy or childbirth again. A mother who gives birth too short is not good for both herself and the baby. This is because the shape and function of the genitals have not returned to normal, resulting in impaired function during pregnancy and childbirth. The closer the pregnant woman is, the more it affects the incidence of retained placenta. The short gestation interval directly affects the health of the fetus it carries. If the pregnancy is too close, the mother tends to experience physiological and pathological damage to the reproductive system (which, 2020). In a study conducted at Aura Syifa Hospital, Kediri Regency, mothers with a birth spacing of less than 2 years and more than 10 years had an effect on the incidence of retained placenta. This is from the proportion of women who experience retained placenta compared to women who gave birth at less than 2 years and 10 years or more and do not experience retained placenta, namely from 25 out of 63 women and 39 out of 168 women who gave birth. you can see. A mother giving birth.

## B. Characteristics Based on Anemia Incidence

Anemia during pregnancy is a condition of the mother with Hb <11 g/dL or Ht <0.33 in the first and third trimesters, but in the second trimester it decreases by 0.5 g/dL to regulate the increase in plasma volume. The value used is 10.5g/dL. Anemia during pregnancy can be divided into mild, moderate and severe anemia. Mild anemia indicates Hb 10-12g/dL, moderate anemia indicates Hb 8-10g/dL), and severe anemia indicates severe anemia (Hb <8g/dL). twenty two. The study found that the majority of women who delivered with retained placenta had moderate anemia, or 39.4%. This research supports Oktasia's research at RSUP dr. Mohammad Hoesin Palembang (OR: 6.889 CI: 95% 5.000 8.750) demonstrated the relationship between anemia and retained placenta. The findings of Ramadhani and Sukarya at Aluizan Bandon Hospital from 1 January to 31 December 2010 show that there is a relationship between hemoglobin levels (anemia) and the incidence of retained placenta in working mothers. The results of this analysis are shown (p. = 0.001, OR = 2.100), which was carried out by Ruthsuyata Siagian et al in 2017 at Hajima Cassal Hospital where anemia during pregnancy, especially severe anemia is very important for the life of the mother and fetus and supports research which states that it it's dangerous. If a pregnant woman is deficient in iron, it also reduces oxygen in the blood, especially in the uterus, which can affect the ability of the uterus to contract after delivery and increase postpartum bleeding.

This is in accordance with what was said by Fraser & Coper Risanto. That is, anemia in pregnant and giving birth women can cause anemia around the blood vessels that supply blood to the myometrium, especially where the placenta attaches. Because the myometrium cannot contract, it becomes weaker and is at high risk. Placental retention. Mothers with anemia may develop urethral obstruction following placental stagnation and postpartum hemorrhage. Mothers who enter labor with low hemoglobin levels (less than 10 g%) may drop more rapidly with any bleeding. Anemia is associated with weakness, which is a direct cause of retained placenta. twenty one

Efforts that can be made to prevent or reduce the occurrence of retained placenta are to give pregnant women iron tablets during ANC by consuming them regularly and provide counseling about anemia management. In addition, pregnant women with anemia provide counseling about the importance of balanced nutrition for pregnant women, prevent the development of anemia in pregnant women, prevent the development of anemia in pregnant women, and prevent further treatment to prevent retained placenta during pregnancy, hospital staff are prevented from referring to Public health center. twenty three.

## Conclution

The conclusion in this study is that the results of the study indicate that there is a relationship between age, spacing between births and the incidence of maternal anemia with the incidence of retained placenta. Suggestions for future researchers are to develop research related to improving regular health promotion regarding pregnancy and childbirth in early detection of complications and complications in labor and birth.

## Reference

A.Fahira Nur, Abd. Rahman, H. K. Faktor risiko kejadian perdarahan Postpartum di rumah sakit umum anutapura. Palu : Jurnal Kesehatan Tudulako, 2019. - 1 : Vol. 5.

Escobar, M. F., Nassar, A. H., Theron, G., Barnea, E. R., Nicholson, W., Wright, A. FIGO recommendations on the management of postpartum hemorrage. California : International Journal of Gynecology & Obstetrics, 2022.

Natalina, Nursari Abdul Syukur, Faridah Hariyani, Dwi Hendriani, R, N. Hubungan kadar Hemoglobin dengan perdarahan post partum di rsud abdul wahab sjahranie [Journal]. - Samarinda : Mahakam Midwifery Journal, 2017. - 2 : Vol. 2.

Prata, N., & Weidert, K. Efficacy of misoprostol of the treatment of postpartum hemorrhage: Current knowladge and implications for health care palnning [Journal]. - Australia : International Journal of Women's Health, 2017. - Vol. 8.

Pustadtin Angka Kematian Ibu di Indonesia [Article]. - Jakarta : Kemenkes RI, 2014.

Satriyandari, Y., & Hariyati, N. R. Faktor-faktor yang mempengaruhi kejadian perdarahan postpartum [Journal]. - Bandung : Journal of Health Studies, 2017. - 1 : Vol. 1.