

The Relationship Of Placenta Retention, Age And Distance Of Birth With Post Partum Bleeding Events In Rsud Dr. Hm Rabain Muara Enim 2021

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ABSTRACT

Post partum hemorrhage is blood loss of more than 500 ml through the birth canal that occurs during or after the delivery of the placenta. Postpartum hemorrhage is one of the contributors to 80% of maternal deaths in addition to infection, high blood pressure during pregnancy, and unsafe abortion. The purpose of this study was to determine the relationship between retained placenta, age, and birth spacing with the incidence of postpartum hemorrhage at Dr.HMRabain M.Enim Hospital in 2021. The research method used was an analytical survey method with a cross sectional approach. Data analysis using chi-square test. The results showed retained placenta (p value = 0.000, OR 124.667), age (p value = 0.001, OR 5.278), and birth spacing (p value = 0.025, OR 9.808). Conclusion: There is a relationship between retained placenta, age and birth spacing simultaneously with the incidence of postpartum hemorrhage at Dr. HMRabain M. Enim in 2021. It is recommended for health workers to further improve public education about postpartum hemorrhage and related factors. with the incidence of postpartum hemorrhage so that the public understands so that it can reduce the incidence of postpartum hemorrhage. age and birth spacing simultaneously with the incidence of postpartum hemorrhage at Dr. HMRabain M. Enim in 2021. It is recommended for health workers to further improve public education about postpartum hemorrhage and related factors. with the incidence of postpartum hemorrhage so that the public understands so that it can reduce the incidence of postpartum hemorrhage.

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1. Introduction

Post partum hemorrhage is blood loss of more than 500 ml through the birth canal that occurs during or after the third stage of labor. Post partum haemorrhage is one of the contributors to 80% of maternal deaths in addition to infection, high blood pressure during pregnancy, and unsafe abortion. Around 810 mothers die every day due to complications related to pregnancy and childbirth. And about 295,000 women die during or after pregnancy and childbirth. The maternal mortality ratio in developing countries is 415/100,000 KH and in developed countries it is 11/100,000[1].

The trend of maternal mortality in South Sumatra Province in the last 5 years has seen a decline but not yet significant due to fluctuations in 2018 (120 cases). In 2018 maternal deaths based on the cause of death included 46 cases (38.3%) due to bleeding, 29 cases (24.2%) due to Hypertension in Pregnancy, 2 cases (1.7%) due to infection, 14 cases due to Circulatory Disorders. Blood, 1 case (0.83%) due to metabolic disorders, and 28 cases (23.3%) due to other diseases. In

2019, based on the Routine Family Health Report, there were 105 cases, lower than the target of 118 cases[2]. Data from the Muara Enim Health Service (2020) states that the number of maternal deaths in Muara Enim Regency has fluctuated in the last 5 years, where there was a drastic decline in 2020 but previously increased in 3 consecutive years, namely from 2017-2019. The maternal mortality rate in Muara Enim Regency cannot be displayed because the number of live births has not reached 100,000 [3].

Post partum haemorrhage is the biggest contributor to maternal mortality. The factors that cause postpartum hemorrhage are uterine atony, retained placenta, uterine inversion, birth canal tears and retained placenta. Meanwhile, other factors that predispose to a close birth distance, prolonged labor, delivery by means of a device, parity, age, pregnancy with uterine myoma, placenta previa, placental absorption, multiple pregnancy, macrosema [4]. From the results of research conducted by Hidayah, et al (2019) regarding the relationship between retained placenta and the incidence of postpartum hemorrhage at the Salatiga Hospital, the results of the chi square test using Continuity Correction, p value = 0.001 ($p \leq 0.05$). Which means that it can be concluded that there is a significant relationship between retained placenta and the incidence of postpartum hemorrhage.

From the results of research conducted by Hidayah, et al (2019) regarding the relationship between retained placenta and the incidence of postpartum hemorrhage at the Salatiga Hospital, the results of the chi square test using Continuity Correction, p value = 0.001 ($p \leq 0.05$). Which means that it can be concluded that there is a significant relationship between retained placenta and the incidence of postpartum hemorrhage. And from the results of the analysis, the Odds Ratio value was 4.06, this means that mothers who experience placental retention after the baby is born have a 4.06 times greater risk of experiencing postpartum hemorrhage than mothers who do not experience placental retention [6].

Another factor that influences postpartum hemorrhage is maternal age. Age is the length of time life is calculated from birth until now. The safest age for pregnancy and childbirth is between 20-35 years, because they are in a healthy reproductive period [7]. at the age of <20 years, the development of the uterus and pelvis of a woman is not mature enough to become a mother, while at the age of 35 years and over the elasticity of the pelvic muscles decreases and the reproductive organs decline so that it can complicate childbirth and can result in maternal death [8].

The next predisposing factor is birth spacing. Birth spacing is the distance in years between the birth of one child and the previous child [9]. The close birth spacing will directly impact the health of women and the fetus they are carrying. After giving birth a woman takes 2 to 3 years to recover her body and prepare herself for the next pregnancy. A uterus that has not yet recovered from previous deliveries has not been able to maximize the formation of food reserves for the fetus and for the mother herself. This has an adverse impact on both the mother and the baby. For the mother herself, it can increase the risk of developing acute anemia. Pregnant women with acute anemia have an increased risk of miscarriage, pregnancy complications, premature birth, and the risk of bleeding during delivery. In addition to having an impact on the recovery of the reproductive organs, the close birth spacing also causes the mother to be unable to maximize breastfeeding for the baby [10].

Based on these data, the researcher is interested in conducting a study with the title "Relationship of Placental Retention, Age and Birth Spacing with Post Partum Bleeding Incidence in RSUD dr. HM Rabain Muara Enim in 2021".

2. Methods

This study uses analytical quantitative research using a cross sectional research design, the study was conducted in January 2022. The sample of this study was partly from mothers giving birth at Dr. HMRabain Hospital Muara Enim in 2021, the number of samples in this study was 83 people.

3. Results and Discussion

3.1 Result

a. Univariate Analysis

TABLE 1
DISTRIBUTION OF FREQUENCY BASED ON INCIDENCE OF POST PARTUM BLEEDING IN RSUD
DR. HM RABAIN MUARA ENIM IN 2021

No	Preeclampsia	Frequency (n)	Percentage (%)
1	Preeclampsia	16	34.8
2	No Preeclampsia	30	65.2
Amount		46	100

Based on Table 1, it is known that from 83 respondents, 31 respondents (37.3%) experienced postpartum hemorrhage and 52 respondents (62.7%).

TABLE 2
FREQUENCY DISTRIBUTION BASED ON PLACENTA RETENTION
AT DR. HOSPITAL. HM RABAIN MUARA ENIM IN 2021

Placental Retention	Frequency	Percentage (%)
Yes	23	27.7
No	60	72.3
Amount	83	100

Based on Table 2, it is known that from 83 respondents, 23 respondents (27.7%) experienced retained placenta and 60 respondents did not experience retained placenta (72.3%).

TABLE 3
FREQUENCY DISTRIBUTION BY MATERNAL AGE AT DR. HOSPITAL. HM RABAIN MUARA ENIM 2021

Age	Frequency	Percentage (%)
High Risk	31	37.3
Low Risk	52	62.7
Amount	83	100

Based on Table 3, it is known that from 83 respondents, mothers who belong to the high-risk group are 31 respondents (37.3%) and those who are at low risk are 52 respondents (62.7%).

TABLE 4
FREQUENCY DISTRIBUTION BASED ON BIRTH DISTANCE AT DR. HOSPITAL. HM
RABAIN MUARA ENIM IN 2021

Birth Distance	Frequency	Percentage (%)
High Risk	6	7.2
Low Risk	77	92.8
Amount	83	100

Based on Table 4, it is known that from 83 respondents, mothers who belong to the high-risk group are 6 respondents (7.2%) and the low-risk group is 77 respondents (92.8%).

b. Bivariate Analysis

TABLE 5
RELATIONSHIP OF RETENTION OF PLACENTA WITH POST PARTUM BLEEDING
AT DR. HOSPITAL. HM RABAIN MUARA ENIM IN 2021

AFRICA POST PARTUM BLEEDING PREVALENCE 2021									
No	Placental Retention	Post Partum Bleeding				Tbrain		<i>p</i> <i>Valu</i>	<i>OR</i>
		Yes		No		N	%		
		N	%	n	%				
1.	Yes	22	95.7	1	4.3	23	100	0.000	124.667
2.	No	9	15.0	51	85.0	60	100		
	Tbrain	31	-	52	-	83	-		

Based on table 5, it is known that from 23 respondents who experienced retained placenta, there were 22 respondents who experienced postpartum hemorrhage and 1 respondent (4.3%) who did not experience postpartum hemorrhage. Meanwhile, of the 60 respondents (27.7%) who did not experience retained placenta, there were 9 respondents (15.0%) who experienced postpartum hemorrhage and 51 respondents (85.0%) who did not experience postpartum hemorrhage. the results of the chi square statistical test at the limit of $= 0.05$ and $df = 1$ obtained p value $= 0.000 = 0.05$ this indicates that there is a relationship between retained placenta and postpartum hemorrhage so that the hypothesis that there is a significant relationship between retained placenta with the incidence of postpartum hemorrhage was statistically proven. The results of the Odds Ratio obtained a value of 124.667 (14,880 – 1044,459) which means that mothers who are diagnosed with retained placenta have 124.667 times greater chance of experiencing postpartum hemorrhage than mothers who are not diagnosed with retained placenta.

TABLE 6
AGE RELATIONSHIP WITH POST PARTUM BLEEDING INCIDENCE AT DR. HOSPITAL. HM RABAIN MUARA ENIM
YEAR 2021

YEAR 2021									
No	Age	Post Partum Bleeding						<i>p</i> <i>Valu</i>	<i>OR</i>
		Yes		No		Tbrain			
		n	%	N	%	n	%		
1	High Risk	19	61.3	12	38.7	31	100	0.001	5.278
2	Low Risk	12	23.1	40	76.9	52	100		
	Tbrain	31	-	52	-	83	-		

Based on table 6, it is known that from 31 respondents who belong to the high-risk age group, there are 19 respondents (61.3%) who experience postpartum hemorrhage and 12 respondents (38.7%) who do not experience postpartum hemorrhage. Meanwhile, of the 52 respondents who belonged to the low-risk age group, there were 12 respondents (23.1%) who experienced postpartum hemorrhage and 40 respondents (76.9%) who did not experience postpartum hemorrhage. Based on the results of statistical tests chi square at the limit of $= 0.05$ and $df = 1$ p value $= 0.001 = 0.05$ this indicates that there is a relationship between age and postpartum hemorrhage so that the hypothesis that there is a significant relationship between age and the incidence of postpartum hemorrhage is proven statistically.

The results of the Odds Ratio obtained a value of 5.278 (2003 – 13.905) which means that respondents in the high risk age group have a 5,278 times greater chance of experiencing postpartum hemorrhage than mothers in the low risk age group.

TABLE 7
RELATIONSHIP BETWEEN BIRTH DISTANCE AND BLEEDING INCIDENCE POST PARTUM AT DR. HOSPITAL.
HM RABAIN MUARA ENIM IN 2021

TBM KASABIN MUARA ENIM IN 2021									
		Post Partum Bleeding						<i>p</i> <i>Valu</i>	<i>OR</i>
No	Birth distance	Yes		No		Tbrain			
		n	%	n	%	N	%		
1	High Risk	5	83.3	1	16.7	6	100	0.025	9,808
2	Low Risk	26	33.8	51	66.2	77	100		
	Tbrain	31	-	52	-	83	-		

Based on table 7, it is known that of the 6 respondents who were included in the high risk group, there were 5 respondents (83.3%) who experienced postpartum hemorrhage and 1 respondent (16.7%) who did not experience postpartum hemorrhage. Meanwhile, from 77 respondents (92.8%) who were included in the low risk group, there were 26 respondents (33.8%) who experienced postpartum hemorrhage and 51 respondents (66.2%) who did not experience postpartum hemorrhage. Based on the results of the chi square statistical test at the limit of $= 0.0$

and $df = 1$, it can be found that $p \text{ value} = 0.025 = 0.05$, this indicates that there is a relationship between birth spacing and postpartum hemorrhage, so the hypothesis that there is a significant relationship between distance births with post partum haemorrhage were statistically proven.

The results of the Odds Ratio obtained a value of 9,808 (1,088 – 88,370) which means that respondents in the high risk birth spacing group have a 9,808 times greater chance of experiencing postpartum hemorrhage than mothers in the low risk birth spacing group..

3.2 Discussion

1. The relationship between retained placenta and the incidence of postpartum hemorrhage

PaFrom table 5, it is known that from 83 mothers it was found that the proportion of mothers diagnosed with retained placenta was 23 respondents (27.7%) and 60 respondents (72.3%). The results of the bivariate analysis showed that out of 83 respondents, there were 23 respondents (27.7%) who were diagnosed with retained placenta, 22 respondents (95.7%) who experienced postpartum hemorrhage and 1 respondent (4.3%) who did not experience postpartum hemorrhage. . Meanwhile, from 60 respondents (72.3%) who did not experience retained placenta, there were 9 respondents (15.0%) who experienced postpartum hemorrhage and 51 respondents (60%) who did not experience postpartum hemorrhage.

Based on the results of the chi square statistical test at the limit of $= 0.05$ and $df = 1$, $p \text{ value} = 0.000 = 0.05$, this indicates that there is a relationship between retained placenta and postpartum hemorrhage so that the hypothesis that states there is a significant relationship statistically proven. The results of the Odds Ratio obtained a value of 124.667 (14,880 – 1044,459) which means that respondents who are diagnosed with retained placenta have 124.667 times the chance of experiencing postpartum hemorrhage compared to respondents who are not diagnosed with retained placenta.

According to the researcher's assumption that there were a number of respondents who did not experience retained placenta but experienced postpartum hemorrhage, as many as 9 cases. Factors that cause postpartum hemorrhage include uterine atony, retained placenta and birth canal tears. Mothers who gave birth at RSUD Dr. HM Rabain Muara Enim who has an effected retained placenta will experience post partum bleeding because the detachment of part or all of the unborn placenta will interfere with contraction and retraction of the uterus and cause the blood sinuses to remain open so that it can cause bleeding. If bleeding occurs continuously it can cause complications such as shock to death. Therefore, precautionary measures must be taken immediately.

2. The relationship between age and the incidence of postpartum hemorrhage

In table 6, data is obtained from 83 respondents, where age is divided into 2 categories, namely High Risk: if age < 20 or > 35 years, Low Risk: if age 20-35 years. From the results of research on univariate analysis, it was found that the proportion of mothers with high risk age was 31 respondents (37.3%) and mothers with low risk age were 52 respondents (62.7%). From the results of bivariate analysis, it was found that from 83 respondents, mothers with high risk age were 31 respondents (37.3%) where there were 19 respondents (61.3%) who experienced postpartum hemorrhage and 12 respondents (38.7%) who did not experience postpartum hemorrhage. . Meanwhile, of the 52 respondents belonging to the low-risk age group, there were 12 respondents (23.1%) who experienced postpartum hemorrhage and 40 respondents (76.9%).

Based on the results of the chi square statistical test at the limit of $= 0.05$ and $df = 1$ obtained $p \text{ value} = 0.001 = 0.05$, this indicates that there is a relationship between age and postpartum hemorrhage, so the hypothesis that there is a significant relationship between age and incidence post partum haemorrhage was statistically proven.

The results of the Odds Ratio obtained a value of 5.278 (2003 – 13.905) which means that mothers with high risk age have 5,278 times the chance of experiencing postpartum hemorrhage compared to mothers of low risk age.

Based on the results of the study, the researchers assumed that at high risk, there was a lot of postpartum hemorrhage. This is because at the age of < 20 years, women's reproductive functions such as the pelvic muscles have not functioned optimally so that it can cause complications during childbirth. Meanwhile, at the age of > 35 years, a woman will experience a decrease in physical

condition due to aging, namely decreased function of organs and body systems including the muscular, nervous, cardiovascular, endocrine and reproductive systems.

3. The relationship between birth spacing and the incidence of postpartum hemorrhage

Table 7 shows data from 83 respondents, where the birth spacing is divided into 2 categories, namely high risk: if the birth distance is < 2 years, low risk: if the birth distance is 2 years. From the results of univariate analysis, it is known that from 83 respondents the proportion of mothers with high risk birth spacing is 6 respondents (7.2%) and mothers with low risk birth spacing are 77 respondents (33.8%). From the results of bivariate analysis, it is known that the proportion of mothers with high-risk birth spacing is 6 respondents (7.23%) there are 5 respondents (83.3%) who experience postpartum hemorrhage and 1 respondent (16.7%) who does not experience postpartum hemorrhage. Meanwhile, of the 77 respondents belonging to the low-risk birth spacing group, 26 respondents (33.8%) experienced postpartum hemorrhage and 51 respondents (66.2%) did not experience postpartum hemorrhage.

Based on the results of the chi square statistical test at the limit of $p = 0.05$ and $df = 1$ obtained p value = $0.025 < 0.05$, this indicates that there is a relationship between birth spacing and postpartum hemorrhage so that the hypothesis that there is a significant relationship between birth spacing with post partum haemorrhage was statistically proven. The results of the Odds Ratio obtained a value of 9,808 (1,088 – 88,370) which means that mothers with high-risk birth spacing have 9,808 times the chance of experiencing postpartum hemorrhage compared to mothers with low-risk birth spacing.

4. Conclusion

There is a simultaneous relationship between retained placenta, age, and birth spacing with the incidence of post partum bleeding at RSUD Dr. HM Rabain Muara Enim in 2021.

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