FACTORS ASSOCIATED WITH POST PARTUM HEMORRHAGE

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ABSTRACT

Postpartum hemorrhage is bleeding or blood loss of more than 500cc that occurs after the child is born either before, during or after the birth of the placenta. Several risk factors increase the incidence of postpartum hemorrhage, namely prolonged labour, more than one baby in the fetus, episiotomy (the act of opening the birth canal by providing a cut around the birth canal), large babies of more than 4000 grams, history of bleeding, anemia during pregnancy, age too late pregnancy.Purpose: Research to determine the factors associated with the incidence of postpartum hemorrhage.Research method: This research is a quantitative study with a cross sectional approach. The sample was part of post partum mothers from the medical records of Regional public hospital H.Padjonga Dg.Ngalle, totaling 40 people. The sampling technique is accidental sampling. The method of data collection in this study was secondary data by opening the register of patients who experienced post partum bleeding at the Regional public hospital H. Padjonga Dg. Ngalle, Takalar Regency. After that retrieve the data and select complete data based on the specified criteria. Data were analyzed using chi-square.

Keywords: Age, Anemia, LILA, Distance, Post partum bleeding

ABSTRAK

Perdarahan postpartum adalah perdarahan atau kehilangan darah lebih dari 500cc yang terjadi setelah anak lahir baik sebelum, selama atau setelah lahirnya plasenta. Beberapa faktor risiko yang meningkatkan kejadian perdarahan postpartum yaitu persalinan lama, bayi dalam janin lebih dari satu, episiotomi (tindakan membuka jalan lahir dengan memberikan sayatan di sekitar jalan lahir), bayi besar lebih dari 4000 gram, riwayat perdarahan, anemia saat hamil, usia kehamilan terlalu tua.Tujuan: Penelitian untuk mengetahui faktor-faktor yang berhubungan dengan kejadian perdarahan postpartum.Metode penelitian:Penelitian ini merupakan penelitian kuantitatif dengan pendekatan cross sectional. Sampel adalah sebagian ibu nifas dari rekam medis RSUD H.Padjonga Dg.Ngalle yang berjumlah 40 orang. Teknik pengambilan sampel adalah accidental sampling. Metode pengumpulan data dalam penelitian ini adalah data sekunder dengan membuka register pasien yang mengalami perdarahan post partum di RSUD H. Padjonga Dg. Ngalle, Kabupaten Takalar. Setelah itu ambil data dan pilih data lengkap berdasarkan kriteria yang ditentukan. Data dianalisis menggunakan chi-square.

Kata kunci: Umur, Anemia, LILA, Jarak, Perdarahan post partum

INTRODUCTION

The maternal mortality rate is very high. Estimates for 2017 show that around 810 women die every day from complications related to pregnancy or childbirth worldwide. The vast majority of maternal deaths are avoidable, because healthcare solutions to prevent or manage complications are widely recognized. All women need access to high-quality care provided by competent skilled health professionals during pregnancy (antenatal care), during delivery (intrapartum care), and care in the weeks following delivery (postpartum and postpartum care). It is very important that all births are attended by a health professional, because management and timely treatment can make the difference between life and death (*World Health Organization*, 2019)

The maternal mortality rate is defined as the death of a woman while pregnant or within 42 days of the end of her pregnancy. Death can be caused by the pregnancy or its management. The success of the maternal health program can be assessed through the main indicator of maternal mortality. Based on data from the Ministry of Health, the number of maternal deaths reached 4,627 people in 2020. This figure increased by 10.25% compared to the previous year of only 4,197 people. Causes of maternal death last year were caused by bleeding (28.29%), hypertension (23%), and circulatory system disorders (4.94%). The province with the next highest number of maternal deaths is East Java, which reached 565 people with 562,006 live births. Followed by Central Java with 530 maternal deaths, then Banten with 242 people, and North Sumatra with 187 people. There is also Aceh with a total of 173 maternal deaths. After that there is East Nusa Tenggara with the number of maternal deaths reaching 151 people, then South Sulawesi with 133 people, and South Sumatra with 129 people and 128 people respectively (Katadata, 2021)

The puerperium is the most critical period after childbirth, during which the risk of maternal morbidity and mortality is very high and often occurs, such as complications of postpartum hemorrhage and postpartum infection (Suherni, 2008).

According to data from the World Health Organization (WHO) in 2018 the prevalence of postpartum hemorrhage reached 3148,921 cases (28.5%). Meanwhile, in 2019 the prevalence of postpartum hemorrhage reached 350,532 cases (29.6%) and in 2020 the prevalence of postpartum hemorrhage reached 352,337 cases (30.01%). Whereas for ASEAN

countries, especially the Philippines and Singapore, it reached 18,932 cases (*World Health Organization,* 2020).

Based on the 2018 Indonesian Health Demographic Survey (IDHS) the prevalence of postpartum hemorrhage reached 71,781 cases (17.9%). Meanwhile, in 2019 the prevalence of postpartum hemorrhage reached 73,583 cases (18.7%) and in 2020 the prevalence of postpartum hemorrhage reached 74,116 cases (19.2%) (Ministry of Health RI, 2018).

Data obtained from the South Sulawesi Provincial Health Office in 2018 the number of postpartum women experiencing postpartum hemorrhage was 532 cases (21.7%). Whereas in 2019 the number of postpartum women experienced post partum bleeding was 544 cases (22.6%) and in 2020 the number of postpartum women experienced post partum bleeding was 552 cases (22.3%) (Ministry of Health RI, 2018).

Postpartum hemorrhage is bleeding or blood loss of more than 500cc that occurs after the child is born either before, during or after the birth of the placenta. According to the time of occurrence, postpartum hemorrhage itself can be divided into primary postpartum hemorrhage which occurs within 24 hours after the baby is born, and secondary postpartum hemorrhage which occurs more than 24 hours to 6 weeks after the baby's birth. Several risk factors increase the incidence of postpartum hemorrhage, namely prolonged labor, more than one baby in the fetus, episiotomy (the act of opening the birth canal by providing a cut around the birth canal), large babies of more than 4000 grams, history of previous bleeding, anemia during pregnancy, too old gestational age (over 38 years) (Bobak, 2018)

Post-partum hemorrhage (PPH) is a classic triad of causes of maternal death. This study evaluated several risk factors for PPH, particularly the antenatal and postnatal history. Post-partum bleeding based on the confirmation of a health worker that two or more cloths (1.5 m each) have been bleeding during the delivery process. Eclampsia is the strongest PPH risk factor. Placenta previa, premature rupture of membranes, preterm or post-term pregnancies, and high parity also increase the risk of PPH. (Winkjosastro, H. 2017)

Post partum bleeding occurs suddenly and is more dangerous if it occurs in women who suffer from pregnancy complications. A mother with bleeding can die in less than an hour. The condition of maternal mortality as a whole is exacerbated by three delays, namely late in making decisions, late in reaching referral sites and late in getting proper help at health facilities (Ministry of Health, RI. 2018)

Obstetrical hemorrhage is a serious complication that can occur in a variety of obstetrical conditions. Treatment for obstetric bleeding can be handled effectively by focusing on the cause of the obstetric bleeding. Pregnant women who die from obstetric hemorrhage will show signs of hemorrhagic shock. This shock is almost always fatal for both mother and fetus, especially if rescue measures are taken too late. Hemorrhagic shock in pregnant women is caused by a decrease in circulating blood volume that occurs acutely (Saifuddin, AB. 2016)

To avoid the occurrence of anemia, it is better for pregnant women to do a pre-pregnancy examination so that they can find out the basic data on the general health of the pregnant woman. In health checks accompanied by laboratory tests, most of the examination and treatment of anemia in pregnancy usually includes giving additional iron and folic acid, a balanced diet also improves anemia (Manuaba. 2016)

The impact that occurs because hemoglobin functions to bind oxygen while oxygen functions to deliver nutrients throughout the body including the placenta. Less hemoglobin means less oxygen, so that the products of conception do not get enough nutrition and oxygen, causing part or all of the placental tissue to detach, the part that is detached is considered a foreign object, so the uterus tries to expel it with contractions, bleeding occurs (Mochtar, R. 2016).

Based on data obtained from Regional public hospital H. Padjonga Dg. Ngalle, Takalar Regency, in 2020 there were 83 people who experienced postpartum hemorrhage, while in 2021 there were 106 people who experienced postpartum hemorrhage (Medical Records of Regional public hospital H Padjonga Dg. Ngalle, 2022).

RESEARCH METHODS

This research uses a quantitative research design with a Cross Sectional Study approach, which is a type of research that emphasizes the time of measurement/observation of data on independent and dependent variables, at one time. Measurements of unlimited variables must be right at one time but have the meaning that each subject is only subject to one measurement at the same time (Arikunto, 2017).

The sample in this study is part of the population to be studied or part of the total characteristics possessed by the population. The sample in this study were some post partum mothers who experienced post partum bleeding in the hospital medical records Regional public hospital H. Padjonga Dg. Ngalle Takalar Regency in 2022.

The method of data collection in this study was secondary data by opening the register of patients who experienced post partum bleeding at the Regional public hospital H. Padjonga Dg Hospital. Ngalle, Takalar Regency. After that retrieve the data and select complete data based on the specified criteria.

Presentation of data will be carried out in the form of a frequency distribution table, then narrated or interpreted systematically and chronologically based on the problem so that research conclusions are obtained.

RESULTS AND DISCUSSION

1. Results of Univariate Analysis

Table 1.1

Frequency Distribution of Age with Post Partum Hemorrhage in Regional public hospital H. Padjonga Dg. Ngalle, Takalar Regency

Age	Frequency	Percentage
Risk	24	60
No Risk	16	40
Total	40	100

Source: Secondary Data 2022

Based on Table 1.1 it shows that the age with post partum bleeding in the Regional public hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 24 (60%) in the risk category and 16 (40%) not at risk.

Table 1.2

Frequency Distribution of Anemia with Post Partum Hemorrhage at Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency

Anemia	Frequency	Percentage
Anemia	24	60
Not Anemia	16	40
Total	40	100

Source: Secondary Data 2022

Based on Table 1.2, it shows that anemia with postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 24 (60%) in the anemia category and 16 (40%) not anemia.

Table 1.3

Frequency Distribution of LILA with Post Partum Hemorrhage at Regional General Hospital H. Padjonga Dg.. Ngalle, Takalar Regency.

LILA	Frequency	Percentage
Risk	26	65
No Risk	14	35
Total	40	100

Source: Secondary Data 2022

Based on Table 1.3, it shows that LILA with postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 26 (65%) at risk category and 14 (35%) not at risk.

Table 1.4

Frequency Distribution of Pregnancy Spacing with Post Partum Hemorrhage at Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency.

Pregnancy Distance	Frequency	Percentage
Near	25	62,5
Far	15	37,5
Total	40	100

Source: Secondary Data 2022

Based on Table 1.4, it shows that the distance between pregnancy and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 25 (62.5%) in the close category and 15 (37.5) in the far category.

Table 1.5

Distribution of Post Partum Hemorrhage Frequency in Regional General Hospitals H. Padjonga Dg. Ngalle, Takalar Regency.

Postpartum Hemorrhage	Frekuensi	Persentase
Postpartum Hemorrhage	25	62,5
Secondary Bleeding	15	37,5
Total	40	100

Source: Secondary Data 2022

Based on Table 1.5, it shows that postpartum hemorrhage in the Regional General Hospital. H. Padjonga Dg. In Ngalle, Takalar Regency, out of 40 respondents, there were 25 (62.5%) of primary bleeding and 15 (37.5%) of secondary bleeding.

2. **Results of Bivariate Analysis.**

Table 2.1

Relationship Between Age and Post Partum Hemorrhage in Regional General Hospitals H. Padjonga Dg. Ngalle, Takalar Regency.

Age	Postpartum Hemorrhage				Amount		p value
	Primary		Secondary				
	F	%	F	%	F	%	
Risk	18	45	6	15	24	60	0,046
No Risk	7	17,5	9	22,5	16	40	
Total	25	62,5	15	37,5	40	100	

Source: Secondary Data 2022

Based on table 2.1, it shows the relationship between age and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 24 (60%) categories of primary bleeding where there were 18 (45%) age categories at risk and 7 (17.5%) categories not at risk. While the secondary category of bleeding was 16 (20%) where 6 (15%) were at risk and 9 (22.5%) were not at risk.

Based on the results of the chi square statistic, a *p value* = 0.046 <0.05 was obtained which indicated that there was a relationship between age and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency.

Table 2.2

Relationship Between Anemia and Post Partum Hemorrhage at Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency.

Anemia	Postpartum Hemorrhage				Amount		p value
	Primary		Secondary				
	F	%	F	%	f	%	
Anemia	12	30	12	30	24	60	0,046
Not Anemia	13	32,5	3	7,5	16	40	
Total	25	62,5	15	37,5	40	100	

Source: Secondary Data 2022

Based on table 2.2, it shows the relationship between anemia and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 25 (62.5%) of the primary bleeding category where there were 12 (30%) of the anemic category and 13 (32.5%) of the non-anemic category. While the secondary category of bleeding was 15 (37.5%) where 12 (30%) were in the anemia category and 3 (7.5%) were in the non-anemic category.

Based on the results of the chi square statistic, a *p value* = 0.046 <0.05 was obtained which indicated that there was a relationship between anemia and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency.

Table 2.3

Relationship Between LILA and Post Partum Hemorrhage at Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency

| LILA | Postpartum Hemorrhage | | | | Amount | | p value |
| | Primary | | Secondary | | | | |
	F	%	F	%	F	%	
Risk	20	50	6	15	24	65	0,010
No Risk	5	12,5	9	22,5	16	35	
Total	25	62,5	3	37,5	40	100	

Source: Secondary Data 2022

Based on table 2.3, it shows the relationship between LILA and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle Takalar District, out of 40 respondents there were 25 (62.5%) categories of primary bleeding where there were 20 (50%) LILA risk categories and 5 (12.5%) categories not at risk. While the secondary category of bleeding was 15 (37.5%) where 6 (15%) LILA were at risk and 9 22.5% were not at risk.

Based on the results of the chi square statistic, a p value = 0.010 <0.05 was obtained which indicated that there was a relationship between LILA and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency.

Table 2.4

Relationship Between Pregnancy Spacing and Post Partum Hemorrhage at Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency.

| Pregnancy Distance | Post Partum Hemorrhage | | | | Amount | | p value |
| | Primary | | Secondary | | | | |
	F	%	F	%	f	%	
Near	20	50	5	12,5	25	62,5	0,003
Far	5	12,5	10	25	15	37,5	
Total	25	62,5	15	37,5	40	100	

Source: Secondary Data 2022

Based on table 2.4, it shows the relationship between pregnancy spacing and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, out of 40 respondents, there were 25 (62.5%) categories of primary bleeding where there were 20 (50%) of pregnancies in the close category and 5 (12.5%) in the long category. While the secondary category of bleeding was 15 (37.5%) of which 5 (12.5%) were in the close category and 10 (25%) were in the distant category.

Based on the results of the chi square statistic, a p value = 0.003 <0.05 was obtained which indicated that there was a relationship between pregnancy spacing and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle Takalar Regency in 2022.

CONCLUSIONS AND SUGGESTIONS

After conducting a study entitled Factors Associated with the Incidence of Postpartum Hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle District of Takalar conducted on 40 respondents who obtained through secondary data Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency in 2022. There is a relationship between age and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle Takalar Regency, this is evidenced by the results of the chi square statistic obtained p value = 0.046 <0.05. There is a relationship between anemia and postpartum hemorrhage at the Regional General Hospital H. Padjonga Dg. Ngalle Takalar Regency, this is evidenced by the results of the chi square statistic obtained p value = 0.046 <0.05. There is a relationship between LILA and postpartum hemorrhage at the Regional General Hospital H. Padjonga

Dg. Ngalle Takalar Regency, this is evidenced by the results of the chi square statistic obtained p value = 0.010 <0.05. And there is a relationship between pregnancy spacing and post partum bleeding at the Regional General Hospital H. Padjonga Dg. Ngalle, Takalar Regency, this is evidenced by the results of the chi square statistic, which obtained a p value = 0.003 <0.05.

It is hoped that future researchers who are interested in conducting further research should be carried out in a more complex and detailed form regarding postpartum hemorrhage and by increasing the number of samples even more. So that it can be used as further reference material for those who wish to conduct similar research as well and can be input for those who are interested in reading the results of this study.

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