

Relationship of Parity, Knowledge and Anemia Status with Perineal Wound Healing in Postpartum Mothers at PMB Bukit Sangkal Palembang Working Area in 2021

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ABSTRACT

Keywords:

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Background: The impact of improper perineal wound care can cause infection and hinder the perineal wound healing process. The appearance of infection in the perineum can spread to the urinary tract or in the birth canal which can cause complications of bladder infection or infection of the birth canal. Based on the results of a preliminary study conducted by researchers at the PMB working area of the Bukit Sangkal Public Health Center, Palembang City, the number of cases of childbirth in 2020 was obtained as many as 345 cases, 215 cases of deliveries with perineal sutures and 48 cases of wet perineal sutures during post-partum follow-up visits today. eighth. The purpose of this study was to determine the relationship between parity, knowledge and anemia status with perineal wound healing in postpartum women at PMB Bukit Sangkal Palembang Working Area in 2021. This study used a quantitative method with a "Cross Sectional" approach. This research will be carried out from 09 to 31 August 2021. The population is all postpartum mothers in PMB Bukit Sangkal Palembang working area who were born at the time the research was conducted. Sampling was done randomly with the technique of "Accidental Sampling" obtained 96 people. Data processing is taken with primary and secondary data. Data were analyzed by univariate and bivariate, obtained parity at risk of 43 people (44.8%) and not at risk of 53 people (55.2%). good knowledge as many as 64 people (66.7%) and less knowledge as many as 32 people (33.3%). anemia as many as 38 people (39.6%) and not anemia as many as 58 people (60.4%). Normal perineal wound healing was 58 people (60.4%) and old perineal wound healing was 38 people (39.6%). There is a parity relationship with perineal wound healing with a P value of 0.000 and an odds ratio of 0.385. The most normal perineal wound healing is 42 people, there is a relationship between knowledge and perineal wound healing with a P Value of 0.140 and an odds ratio of 4,529. There is a relationship between anemia and perineal wound healing. P Value 0.000 and odds ratio 0.073. So it is recommended to improve the quality of services, especially services, especially services for postpartum mothers with perineal wounds, by providing education about wound care and nutrition.

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1. Introduction

Perineal wound is an injury to the perineum due to a tear in the birth canal either due to rupture or an episiotomy during delivery of the fetus [1]. Perineal injuries can have an unpleasant impact on the mother, such as pain and fear of moving after delivery, which can lead to many problems, including uterine sub involution, non-smooth locheal expulsion, and postpartum hemorrhage [2].

Based on data from the World Health Organization (WHO) there were 2.7 million cases of perineal rupture in women giving birth. This figure is estimated to reach 6.3 million in 2050. Along with the increasing number of midwives who do not know well about midwifery care. In America, 26 million women give birth who experience perineal rupture, 40% of whom experience perineal rupture. In Asia, perineal rupture is also quite a problem in society, 50% of the incidence of perineal rupture in the world occurs in Asia. The prevalence of maternity mothers who experience perineal rupture in Indonesia with the incidence of suture wound infection

is 5% and bleeding is 7% and postpartum maternal mortality is 8%. In East Java, perineal ruptures experienced by women in labor are 7% bleeding, and suture wound infections are 5% [3].

From the results of the Indonesian Demographic and Health Survey (IDHS) 2017, the health status of mothers and children in Indonesia still needs to be improved to reduce maternal and child mortality. The IDHS revealed, the Maternal Mortality Rate (MMR), which is 305 per 100,000 live births, while the Infant Mortality Rate (IMR) is 223 per 1000 pregnancies and is still below the 2030 Sustainable Development Goals (SDGs) target, which is 70/100,000 KH (live births). and IMR 16.84/1000 KH (live births) [4].

The decrease in maternal mortality during the period 1991-2015 from 390 to 305 per 100,000 live births. Although there is a tendency to decrease maternal mortality, it has not succeeded in achieving the MDGs target that must be achieved, which is 102 per 100,000 live births in 2015 (Ministry of Health of the Republic of Indonesia, 2019) [5].

The cause of maternal death related to childbirth, especially postpartum hemorrhage, is the main cause, 41% of maternal deaths in Indonesia. The incidence of postpartum hemorrhage ranges from 5% to 15% where the frequency of postpartum hemorrhage according to the cause is uterine atony 50-60%, retained placenta 16-17%, retained placenta 23-24%, perineal rupture 4-5% and blood disorders 0,5-0.8% (Sigalingging, 2018) [6].

The prevalence of maternal mortality cases with post partum infection in Indonesia in 2016 was 23.5% from 1,015 cases of post partum infection and 17.9% of cases died with post partum infection in 2016. Factors causing puerperal infection include low immunity, poor post partum maternal care, abstinence behavior, low maternal nutritional status, unclean personal hygiene, anemia and fatigue (Jurnal Agustin et al, 2021).

The wound healing process consists of 3 phases, namely inflammation, proliferation (epithelialization) and maturation (remodelling). Wound healing in the inflammatory phase occurs until the 5th day after surgery, the length of this phase can be short if there is no infection. The wound healing process is influenced by various factors, namely: age, anemia, comorbidities, vascularization, nutrition, obesity, drugs, smoking, early mobilization, personal hygiene, and stress (Nurani, 2015) [7].

Factors that can affect wound healing according to Smeltzer (2013) are external factors and internal factors. External factors such as culture, mother's knowledge, infrastructure, handling officers, and nutrition. Internal factors such as maternal age, treatment method, personal hygiene, activity and infection [8].

The impact of improper perineal wound care can cause infection and hinder the perineal wound healing process. The appearance of infection in the perineum can spread to the urinary tract or in the birth canal which can cause complications of bladder infection or infection of the birth canal. Delayed treatment can lead to death in postpartum mothers considering the physical condition of postpartum mothers is still weak [9].

Prevention of infection of the perineal wound in postpartum women can be done by counseling and IEC on the correct way of caring for the perineal wound, a balanced diet and adherence to taking medication, appropriate in terms of drinking rules, timing, dosage, correct medication, and recommending postpartum women to timely control, if postpartum mothers can perform perineal wound care in the right way at home, eat a daily diet with a balanced diet and adhere to taking medication according to the recommendations given, it can reduce and prevent signs of perineal wound infection [10].]

Based on research conducted by Devita (2018) there is a statistical relationship between knowledge and perineal wound care with value $(0.000) < (0.05)$. There is a statistical relationship between parity with perineal wound care with value $(0.003) < (0.05)$ [10].

From the results of research conducted by Malini (2019), the results of the chi square test showed a p-value of 0.000, meaning that there was a relationship between anemia and the healing time of perineal wounds at the Mlati II Health Center. Based on the research data that has been presented, it shows that anemia is one of the factors that causes the perineal wound healing time [11].

Based on the results of a preliminary study conducted by researchers at the PMB working area of the Bukit Sangkal Health Center, Palembang City, the number of cases of childbirth in 2020 was obtained as many as 345 cases, 215 cases of deliveries with perineal sutures and 48 cases of wet perineal sutures during postpartum follow-up visits today. eighth. The condition of the mother giving birth in the PMB working area of the Bunkit Sangkal Health Center varied greatly in terms of lifestyle, hemoglobin levels, socioeconomic status, education of the mother and husband, quality of nutrition, and awareness to always maintain body condition during the puerperium.

Based on the description above, the researchers are interested in conducting a study entitled "Relationship of Parity, Knowledge and Anemia Status with Perineal Wound Healing in Postpartum Mothers in PMB Bukit Sangkal Palembang Working Area in 2021".

2. Method

This study uses analytical quantitative research using a cross-sectional research design performed on August 9-31, 2021., the sample of this study is partly postpartum mothers at PMB Bukit Sangkal Palembang Working Area, the number of samples in this study was 96 people.

3. Results and Discussion

3.1 Research Result

a. Univariate Analysis

Table 1
Distribution of Parity Frequency in PMB Bukit Puskesmas Working Area
Deny Palembang in 2021

parity	F	%
at risk	43	44.8
No Risk	53	55.2
Tbrain	96	100

Based on table 1 above, it can be seen that 43 people are at risk (44.8%) and 53 people are not at risk (55.2%).

Table 2
Distribution of Knowledge Frequency in PMB Bukit Puskesmas Working Area
Deny Palembang in 2021

Knowledge	F	%
Good	64	66.7
Not enough	32	33.3
Tbrain	96	100

Based on table 2 above, it can be seen that 64 people have good knowledge (66.7%) and 32 people have less knowledge (33.3%).

Table 3
Distribution of Anemia Frequency in PMB Work Area of Bukit Health Center
Deny Palembang in 2021

Anemia	F	%
Yes	38	39.6
Not	58	60.4
Tbrain	96	100

Based on table 3 above, it can be seen that 38 respondents (39.6%) had anemia and 58 (60.4%).

Table 4
Distribution of Frequency of Perineal Wound Healing in PMB Working Area of Public Health Center
Bukit Sangkal Palembang Year 2021

Perineal Wound Healing	F	%
Normal	58	60.4
Long	38	39.6
Tbrain	96	100

Based on table 4 above, it can be seen that respondents with normal perineal wound healing were 58 people (60.4%) and 38 people (39.6%) had old perineal wound healing.

b. Bivariate Analysis

Table 5
The Relationship of Parity with Perineal Wound Healing in Regional PMB Bukit Sangkal Health Center Palembang in 2021

No	parity	Wound healing						p	OR
		Perineum				Tbrain			
		Normal		Long		F	%		
f	%	f	%	F	%				
1.	at risk	16	37.2	27	62.8	43	100	0.000	0.385
2.	No Risk	42	79.2	11	20.8	53	100		
	Total	58	-	38	-	96	-		

PaFrom table 5 above, it is known that respondents with parity are not at risk of experiencing normal perineal wound healing at most, namely 42 people, from the results of the chi-square test, the P value is 0.000 and the ODS ratio is 0.385.

Table 6
Relationship of Knowledge with Perineal Wound Healing Incidence in Regional BPM Bukit Sangkal Health Center Palembang in 2021

No	Knowledge	Wound healing						p-Value	OR
		Perineum				Tbrain			
		Normal		Long		f	%		
f	%	F	%	f	%				
1.	Good	42	65.6	22	34.4	64	100	0.140	4,529
2.	Not enough	16	50	16	50	32	100		
	Tbrain	58	-	38	-	96	-		

In table 6, it is known that respondents with good knowledge who experienced normal perineal wound healing were at most 42 people, from the results of the chi-square test, the P value was 0.140 and the ods ratio was 4.529.

Table 7
Relationship of Anemia with Perineal Wound Healing Incidence in Regional BPM Bukit Sangkal Health Center Palembang in 2021

No	Anemia Status	Wound healing						p- Value	OR
		Perineum				Tbrain			
		Normal		Long		F	%		
f	%	f	%	F	%				
1.	Yes	6	15.8	32	84.2	38	100	0.000	0.073
2.	Not	52	89.7	6	10.3	58	100		
	Tbrain	58	-	38	-	96	-		

In table 7, it is known that respondents without anemia who experienced normal perineal wound healing were at most 52 people, from the results of the chi-square test, the P value was 0.000 and the ODS ratio was 0.073.

3.2 Discussion

a. Connection Parity with Perineal Wound Healing

Based on the analysis, it is known that more than half, namely 53 people (55.2%) of parity are not at risk. According to researchers, mothers with parity at risk, namely giving birth more than 3 times, they will move less because they have given birth often so body functions decrease and feel weak so that the wound area and femininity will be more moist making the wound heal slowly.

Winjokjastro's theory says parity 2-3 is the safest parity for pregnancy and childbirth, parity 1 and high parity (parity > 3) have a higher maternal mortality rate and the higher the parity, the higher the maternal mortality rate. High parity can cause several problems for the mother in question, so that the mother cannot perform her role well as a parent (Wulandari, 2018) [12].

Meanwhile, according to Rohmin (2017) mothers with high parity (often pregnant and giving birth) can make mothers experience problems with nutritional needs and nutritional status, so that often it can affect wound healing. Mothers with low parity will pay more attention to nutrition during pregnancy and during the

puerperium so that their nutritional needs are well fulfilled to help the postpartum recovery process [13].

It is the same with Risa Devita's statement (2019) that respondents with high parity tend to treat perineal wounds well compared to respondents with low parity. This is because mothers with high parity already have previous experience of perineal wound care so that mothers do good care, while mothers with low parity do not have experience about perineal wound care so that mothers do not understand how to do good perineal wound care [11].

Based on the researcher's analysis, mothers with low parity consider pregnancy and childbirth to be special so that everything is prepared carefully, both physically and mentally by seeking various kinds of information and fulfilling good nutrition during pregnancy and childbirth so that this good behavior has an impact on the future. healthy postpartum, breast milk comes out smoothly and wounds heal quickly. On the other hand, mothers with high parity, because they have experience and consider childbirth and pregnancy are normal.

b. Connection Knowledge with Perineal Wound Healing

Based on the researcher's analysis, it is known that more than half as many as 64 people (66.7%) with good knowledge.

According to research conducted by Netti Meilani Simanjuntak (2016) there is a significant relationship between the mother's level of knowledge and the wound healing process in postpartum mothers (p value = 0.008) [14].

According to the researchers, the results of this study were different from the current study, which had different results due to differences in places, respondents, customs, customs and others that influenced the results of different studies. knowledge is not related to perineal wound healing, mothers with good knowledge are known to be slow to heal their perineal wounds, from the results of this research analysis because mothers with good knowledge have parity at risk and many experience anemia during pregnancy and postpartum, in addition to the type of injury to the perineum It also has an effect on wound acceleration.

Mother's knowledge about postpartum care will determine the length of perineal wound healing. When mothers have less knowledge of perineal wound care, health problems can arise. In addition, it can prolong wound healing time (Primadona & Susilowati, 2015) [15].

In accordance with Walyani's theory (2015) where knowledge about perineal wounds is the mother's understanding of caring for perineal wounds properly so that infection does not occur, namely by applying ice compresses to the perineal wound area to reduce pain; give antiseptic fluids such as povidone iodine in the perineal wound area; and doing Kegel exercises [1].

According to Ahmad Susanto in Nurrahmaton's research (2018) Knowledge basically consists of a number of facts and theories that allow a person to be able to solve the problems he faces, this knowledge is obtained both from direct experience and through the experiences of others. Behavior that is based on knowledge will be more lasting than behavior that is not realized by knowledge [16].

According to Rohmin (2017) in Sri Susilawati's research (2020) sutures for the birth canal/perineum will usually heal faster in episiotomy wounds than spontaneous ruptures, because the tear forms are regular so they are easy to put together or stitch [13].

According to the researcher, respondents with the type of episiotomy wound had higher self-confidence than those with spontaneous rupture. Mothers with episiotomy wounds feel that the wound is better so they are not afraid to do activities or mobilize faster.

As discussed earlier, early mobilization exercises are useful for increasing blood circulation around the genitals, accelerating wound healing, launching lochia expenditure and accelerating normalization of the genitals in their original state.

c. Connection Anemia Status with Perineal Wound Healing

Based on the researcher's analysis, it was known that more than half of the 58 people (60.4%) had anemia status in the non-anemic category.

This study has the same results as the research conducted by Dwi Sri Gunanti There is a relationship between anemia and the duration of healing of perineal sutures in postpartum mothers at the DR Asmir Hospital, Salatiga in 2010. This is evidenced by a p value of 0.017 with an alpha of 0.05. P value is smaller than 0.05 alpha [17].

Research conducted by Esti Handayani (2015) at the Mukid Health Center showed that the majority of postpartum mothers experienced anemia as many as 21 respondents (67.7%) of 31 samples [18].

Anemia is a condition in which HB levels and or erythrocyte counts are lower than normal values. Pregnant women or in the puerperium are declared anemic if their hemoglobin levels are below $< 12-11\text{gr}\%$ [19].

The effect of anemia during the puerperium is the occurrence of uterine subinvolution which can cause post partum bleeding, facilitate infection of the puerperium, decrease breast milk production and easy mammary infection [20].

The condition of anemia will slow down the wound healing process considering that cell repair requires sufficient protein levels. Therefore, people who experience a deficiency in blood hemoglobin levels will experience a longer healing process (Perry & Potter, 2005) [21].

The results of this study are in line with the theory presented by Morison (2014) in Lestari's research (2017) the effect of anemia on the duration of wound healing due to maternal anemia when there is a decrease in the capacity of blood carrying oxygen (hemoglobin). In particular, it is particularly important when associated with hypovolaemia due to hemorrhage. In cases of anemia, tissue hypoxia often occurs, whereas oxygen plays an important role in the formation of collagen, new capillaries, and epithelial repair, as well as infection control. The growing wound margin is an area of very high metabolic activity. Hypoxia inhibits mitosis in migrating epithelial cells and fibroblasts, collagen synthesis, and the ability of macrophages to destroy ingested bacteria thereby slowing the healing process. If hypoxia occurs due to anemia, then the function of these leukocytes can automatically decrease and wound healing can be hampered, hypoxia affects oxidative phosphorylation and therefore also affects ATP synthesis. Inadequate oxygenation and nutritional deficiencies make the system more susceptible to infection [9].

According to researchers, postpartum mothers who experience anemia can slow down the wound healing process due to cell repair. Therefore, mothers who experience a lack of hemoglobin levels in the blood will experience a long wound healing process.

4. Conclusion

There is a correlation between parity, knowledge and anemia status simultaneously with Perineal Wound Healing in Postpartum Mothers at PMB Bukit Sangkal Palembang Working Area in 2021.

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