

The Relationship of Cleanliness and Vulva Hygiene in Postpartum Mothers' Perineal Wound Infection

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Abstract

Infection during the postpartum period is one of the reasons for the high number of deaths in Mothers. Data from the 2018 WHO shows that infection is the second cause of postpartum maternal deaths in the world. In Indonesia, infection contributes to 10% of deaths of mothers in Indonesia (Sarwono, 2018). Infection perineal wounds were 207 cases (West Java Health Office, 2021). Guard cleanliness and vulva hygiene with Correct can prevent infection of the mother's perineum postpartum. Research objectives This is, for now, the connection between cleanliness and vulva hygiene in infections postpartum mother's perineal wounds at PMB Midwife M in 2023. Types and Designs Study This use method survey analytic observational with a cross-sectional approach. Research sample This is a total sampling technique where the sample size is the same as the population, namely 30 people. Method of collecting data in research: This is done through questionnaires and sheet observations. Then, the data is analyzed in a way univariate and bivariate with the Chi-square test (χ^2) at a significant level α 0.05. The results of the study show that there were six respondents who did not do vulva hygiene well, and 1 of them experienced infection. Got its mark from variable vulva hygiene with incident infection perineal wounds $p = 0.000$. Results p value < 0.05 , then H_a is accepted. Yes, there is a connection between cleanliness and vulva hygiene with incident infection perineal wounds in mothers postpartum in PMB M, the expected public can increase the role of active Mothers postpartum to get information about health, especially about vulva hygiene.

Keyword : postpartum mothers; cleanliness; vulva hygiene; perineal wounds

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INTRODUCTION

The puerperium period starts from 1 hour after the birth of the placenta until 6 weeks (42 days), then postpartum services must be carried out at that time to meet the needs of the mother and baby, which includes prevention, early detection and treatment of complications and diseases that may occur (Syalfina et al., 2021).

The postpartum period is included in a critical transition period for mothers and babies physiologically, emotionally, and socially (Ozkaya et al., 2024). In developed or developing countries, the main focus of mothers and babies is too much on pregnancy and childbirth, but the actual situation is the opposite because the risk of maternal and infant pain and death is more common in the postpartum period (Darwati, 2019). Infection in the postpartum period is one of the causes of the high maternal mortality rate (Joseph et al., 2024). The incidence of postpartum infections is most often caused by suture wounds in the perineum that have been infected. Perineal wounds caused by tears or episiotomy (Darukshan & Grover, 2022). If the

perineal wound is not properly cared for by keeping the vaginal area clean and dry, bacteria can multiply in the perineal wound area (Graziottin, 2024). One of the factors that cause postpartum infection comes from the birth canal injury, which is a good medium for the development of germs (Malmir et al., 2022). Based on World Health Organization (WHO) data in 2018, as many as 400 women gave birth and died every day, and the largest occurs in developing countries, such as countries in the African region, Haiti, Guyana, Bolivia, Nepal, Myanmar, India, and Indonesia. The second cause of death of postpartum mothers in developing countries, including in Indonesia, is infection. Data from WHO in 2018 shows that infection is the second leading cause of postpartum maternal mortality in the world (Baguiya et al., 2024). In India, the presentation of symptoms of genital infections is 5.3%; in Egypt, 15.5%; in Bangladesh, 16.5%; and in Indonesia, infections contribute to 10% of maternal mortality in Indonesia (globally 15%). The maternal mortality rate in West Java in 2020 was 27.92% bleeding, 3.76% infection (West Java Health Office, 2020), and perineal wound infection in as many as 207 cases (Rohmin et al., 2017).

Based on a preliminary study obtained at the Independent Practice of Midwife M in January-December 2022, a population of 30, and 10 of them experienced perineal wound infection at the second (7 days) postpartum visit. From this data, postpartum mothers who experience perineal wound infections can be handled properly at PMB Midwife M, and efforts to overcome these problems can be carried out with correct perineal wound care. Based on the above background, the researcher is interested in researching the relationship between hygiene and vulva hygiene in perineal infection wounds of postpartum mothers in the Independent Practice of Midwives M in 2022.

RESEARCH METHODS

The type and design of this study uses an observational analytical survey method with a cross sectional approach, where the conceptual framework in this study is about the relationship between hygiene and vulva hygiene with perineal wound infection of postpartum mothers in PMB Midwife M.

This study was carried out in March and April 2023 at the Independent Practice of Midwives (PMB) Midwife M. The population in this study was all postpartum mothers with perineal injuries at PMB Midwife M in March and April 2023. The population for the last month with perineal injuries amounted to 30 people. The sample of this study uses a total sampling technique where the number of samples is the same as the population, which is 30 people.

The research sample used in this study is based on inclusion criteria, which are criteria where the research subject can represent a qualified research sample as a sample, namely postpartum mothers with spontaneous rupture/episiotomy degree I and II, postpartum mothers on the third to sixth day after childbirth, willing to be respondents and have signed consent sheets, can read and write. Meanwhile, the exclusion criterion is a criterion where the research subject cannot represent the sample because it does not meet the requirements of a research sample, namely postpartum mothers who work as health workers, mothers with DM, and respondents who refuse.

The sampling technique in this study is total sampling where the total number of the population is used as a sample in this study (Van Haute, 2021). The sampling technique in this study is a sampling technique when all members of the population are used as samples.

The sampling technique in this study is the total number of postpartum mothers on the 7th day in March – April 2023 at PMB Midwife M. In this study, the independent variables are cleanliness and vulva hygiene, and the dependent variable is perineal wound infection. The method of data collection in this study is the Guttman scale, namely a characteristic frequency

distribution questionnaire. The researcher uses a questionnaire in the form of questions that will be filled out by 30 respondents to find out the characteristics of knowledge about the relationship between hygiene and vulva hygiene to perineal wound infection in postpartum mothers. Then, an infection event observation sheet based on REEDA signs will be used to determine the incidence of positive and negative perineal wound infections. The researcher put a checkmark (✓) on the observation sheet according to the results of the answer to the statement item using a Guttman scale which includes Yes (1) and No (0) answers. Quantitative data in this study were collected for statistical analysis using surveys or questionnaires filled out by respondents.

RESULTS AND DISCUSSION

1. Respondent Characteristics Analysis

Table 1. Respondent Characteristics Analysis

Characteristic	Group	
	Intervention (n= 30)	
	N (number)	%
Age		
Mean ± SD	2.2 ± 48	
Min – Max	1 - 3	
< 20 years	1	3.3%
21-35 years old	22	73.3%
>35 years old	7	23.3%
Parity		
Mean ± SD	1,57+50	
Min – Max	1-2	
Primipara	13	43.3%
Multipara	17	56.7%
Education		
Mean ± SD	2,27+82	
Min – Max	1-3	
SD	7	23.3%
JUNIOR	8	26.7%
SMA	15	50.0%
Work		
Mean ± SD	1,67+47	
Min – Max	1-2	
Work	10	33.3%
Not Working	20	66.7%

Source: Primary data, 2022

2. Bivariate Analysis

Table 2. Vulva Hygiene in Postpartum Mothers

It	Vulva Hygiene	Frequency	Percentage
1	Done	24	80%
2	Not done	6	20%
Total		30	100%

Source: Primary data, 2022

Table 3. The Relationship between Vulva Hygiene and the Incidence of Perineal Wound Infection in Postpartum Mothers

Vulva Hygiene	Incidence of infection		Total	P value
	Infection	Non-infectious		
	n %	n %	n %	
Done	0 0	24 100	24 80	0,000
Not done	5 75	1 25	6 20	
Total	5 16,7	25 83,3	30 100	

Source: Primary data, 2022

Discussion

Based on the results of a study conducted by postpartum mothers who experienced perineal rupture in PMB Midwife M from 30 respondents showed that they did not do vulva hygiene with as many as 6 (20%), while those who did vulva hygiene well as 24 respondents (80%).

Based on the characteristics of 30 respondents, the first is related to the age of 15 respondents with an age category of 21-35 years, as many as 22 people with a presentation of 73.3%. The results of the researcher's analysis of vulva hygiene at the age of 21-35 were five respondents who did not do vulva hygiene well and 17 respondents who did vulva hygiene well. In accordance with previous research, the age factor is very influential, as the prevention of wound infections occurs faster at a young age than in the elderly. (Putri, n.d.)

Vulva hygiene in postpartum mothers will be better if supported by a high level of education. Of the 30 respondents, most of the postpartum mothers have a high school education, namely 15 respondents (50.0%). Based on the results of the researcher's analysis of vulva hygiene in respondents with high school education levels, all of them do vulva hygiene well. The researcher assumes that basically, the level of education of postpartum mothers with a good level of education will have better knowledge when compared to lower ones. Based on previous research, maternal knowledge about vulva hygiene is very important because the

wrong vulva hygiene treatment technique after childbirth greatly determines the healing time of perineal wounds. This is likely influenced by educational factors.

Characteristics of the number of parity in postpartum mothers Most of the mothers gave birth to twice as many as 17 mothers (56.7%). Based on the results of the researcher's analysis of vulva hygiene in respondents with mothers who gave birth twice, there were three mothers who did not practice vulva hygiene well and 14 mothers who practiced vulva hygiene well. However, based on the analysis obtained by postpartum mothers, most of them were mothers who gave birth once as many as 13 respondents. So, it can be concluded that postpartum mothers who have given birth before will understand more about how to do vulva hygiene properly to prevent perineal wound infections.

Based on previous research, where that age is the productive age? At a healthy reproductive age, most women can undergo pregnancy, childbirth, and postpartum in optimal conditions so that the mother and baby are healthy. At the age of 20 – 35 years, the female reproductive organs have developed and function optimally so that it will reduce various risks during pregnancy and childbirth. Based on work, most mothers work as mothers who do not work, as many as 20 respondents (80%). The results of the researcher's analysis of vulva hygiene in respondents with the level of work of mothers who did not work were that there were five mothers who did not practice vulva hygiene well and 15 mothers who did vulva hygiene well. The results of the study conducted on postpartum mothers who experienced perineal rupture in PMB Midwife M from 30 respondents showed that there was an infection of 5 respondents (16.7%), while most of the postpartum mothers did not have an infection as many as 25 respondents (83.3%). The most common incidence of infection in the postpartum period is caused by stitch wounds in the infected perineum. Perineal wounds due to tears or episiotomy. If the wound is not properly cared for, namely by keeping the genital area clean and dry, bacteria can multiply in the wound area. Based on the results of this study, most of them do not have perineal wound infections, but there are still mothers who have infections. This can be caused by several factors, one of which is poor vulva hygiene; based on the results of the researcher's analysis, there are six postpartum mothers who do not do vulva hygiene well, and from the 8 respondents, 5 mothers who experience infection. Based on the results of the study, 24 respondents (100%) who did not have an infection did not do vulva hygiene well, while those who did not do vulva hygiene well did not have an infection, as many as five respondents (25%), and one respondent (75%) did not have an infection. The results of the calculation of the chi-square test obtained a Fisher Exact Test value of $\alpha = 0.05$ and a p-value = 0.000, so it can be concluded that there is a relationship between vulva hygiene and the incidence of perineal wound infection in postpartum mothers at PMB Midwife M in 2023.

CONCLUSION

Based on the results of the study titled The Relationship between Vulva Hygiene and the Incidence of Perineal Wound Infection in Postpartum Mothers at PMB Midwife M in 2023, the following conclusions can be drawn: The results of data analysis show that most postpartum mothers in PMB Midwife M perform vulvar hygiene well (80%). The results of the analysis of the incidence of infection in postpartum mothers in PMB Midwife M were mostly uninfected by 25 respondents (83.3%), and a small number were infected by five respondents (16.7%). There was a relationship between vulvar hygiene and the incidence of perineal wound infection in postpartum mothers in PMB Midwife M. The results of the Chi-square statistical test obtained a Fisher Exact Test value of p-value (0.000) < $\alpha = (0.05)$ so that H₁ was accepted.

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