

NUTRITIONAL STATUS WITH THE SUTURE WOUND HEALING OF POSTPARTUM MOTHERS AT JETIS PUBLIC HEALTH CENTER IN YOGYAKARTA CITY

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ABSTRAK

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Abstract:

Factors causing the puerperal infection can come from birth canal wounds which are a good medium for the growth of germs. This is caused by low maternal endurance after delivery, poor care, and poor hygiene in birth canal wounds. The purpose of this study was to determine the relationship between nutritional status and healing of perineal sutures in postpartum mothers at Jetis Health Center. This study used a cross-sectional research design. The study was conducted at the Jetis Health Center with a sample of 41 respondents and was taken by accidental sampling. The independent variable in this study was nutritional status, while the dependent variable was perineal suture healing. Data analysis using the chi-square test showed a value of p-value = 0.021 with an OR value of 5.32, meaning that mothers with poor nutritional status had a 5.3 times greater risk of experiencing perineal wound healing than mothers with good nutritional status.

Abstrak:

Faktor penyebab terjadinya infeksi nifas bisa berasal dari perlukaan pada jalan lahir yang merupakan media yang baik untuk berkembangnya kuman. Hal ini diakibatkan oleh daya tahan ibu yang rendah setelah melahirkan, perawatan yang kurang baik dan kebersihan yang kurang terjaga pada perlukaan jalan lahir. Tujuan dilakukan penelitian ini yaitu untuk mengetahui hubungan status gizi terhadap penyembuhan luka jahitan perineum pada ibu Nifas di Puskesmas Jetis. Penelitian ini menggunakan desain penelitian cross sectional. Penelitian dilakukan di Puskesmas Jetis dengan jumlah sampel 41 orang responden dan diambil secara accidental sampling. Variabel bebas dalam penelitian ini adalah status gizi sedangkan variabel terikatnya penyembuhan luka jahitan perineum. Analisis data menggunakan uji chi-square menunjukkan bahwa nilai p value = 0.021 dengan nilai OR 5.32 artinya ibu yang status gizinya kurang akan berisiko 5.3 kali lebih besar lama proses penyembuhan luka perineum dibandingkan ibu dengan status gizinya bagus.



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INTRODUCTION

The Maternal Mortality Rate in Yogyakarta in 2016 reported that the number of maternal deaths reached 39 cases, in 2017 it reached 34 cases, while in 2018 it increased to 36 cases. The most common causes of maternal death in Yogyakarta were bleeding (11 cases), hypertension (6 cases), tuberculosis (4 cases), heart (4 cases), cancer (3 cases), hyperthyroidism (2 cases), sepsis, asthma, shock, embolism, aspiration, and kidney failure in 1 case each [1].

Postpartum infections, such as sepsis, are still the leading cause of maternal death in developing countries. Many women experience pain in the perineal and vulvar areas for several weeks, especially if there is tissue damage or an episiotomy in the second stage of labor so the mother's perineum must be regularly monitored for the possibility of infection [2].

Factors causing the puerperal infection can come from injury to the birth canal which is a good medium for the growth of germs. This is caused by low maternal endurance after childbirth, poor care, and poor hygiene in birth canal injuries [2]. In addition, nutritional factors are also considered to play an important role in the wound healing process. Mothers who have good nutritional status will experience faster perineal wound healing [3]. The good nutritional status will be achieved if the mother eats a variety of, nutritious, and balanced foods.

In the process of healing perineal sutures in postpartum mothers, the diet given must be of high quality, high in nutrition, sufficient in calories, high in protein, and contains lots of fluids [4]. However, a phenomenon that is often found in the community is the existence of food restrictions for postpartum mothers. Postpartum mothers are prohibited from consuming certain foods for a certain period time. For example, mothers who have just given birth to the Dayak tribe are prohibited from eating meat, eggs, fish,

vegetables such as pumpkin, cucumber, and seasoned vegetables. The culture of abstinence from eating is related to the non-healing of perineal wounds in postpartum mothers [5].

In an effort to improve health, especially for postpartum mothers, the role of the community is also very important, one of which is by participating in integrated service post activities. Integrated service post is an activity that embodies community participation which is managed by the community, from the community, and for the community. The implementation is carried out by cadres who are trained in main activities, one of which is maternal and child health, namely examination during the postpartum period [6]. The purpose of this study was to determine the relationship between nutritional status and healing of perineal sutures in postpartum mothers at the Jetis Health Center.

RESEARCH METHOD

This study used a cross sectional study design. The research was conducted at Jetis Public Health Center Yogyakarta. The type of research conducted is an analytical survey. The population in this study were all postpartum mothers 0-6 weeks who made postpartum visits at the Jetis Health Center Yogyakarta. The sample was conducted using accidental sampling, ie samples were taken from respondents or cases that happened to be in a certain place or situation. The number of samples in this study were 41 people.

The independent variable in this study is nutritional status and the dependent variable is perineal wound healing. Data analysis consisted of univariate and bivariate analysis. Univariate analysis was used to determine the frequency distribution of each variable. Bivariate analysis was used to determine the relationship between nutritional status and perineal wound healing using the chi-square test.

The relationship between variables is said to be meaningful if the p-value < 0.05 .

RESULTS AND ANALYSIS

1. Univariate Analysis

The variable nutritional status of postpartum mothers in this study was categorized into two, namely good nutritional status and poor nutritional status. The frequency distribution of the nutritional status of the respondents is presented in Table 1.

Table 1.
Distribution of Frequency Based on Nutritional Status of Postpartum Mothers at Jetis Health Center Yogyakarta 2019

Nutritional Status	n	%
Good	19	46%
Less	22	54%
Total	41	100%

2. Bivariate Analysis

Table 3.
Relationship of Nutritional Status to Perineal Wound Healing

Nutritional Status	Wound Healing				Total		OR	p
	Not Healed		Healed		N	%		
	n	%	n	%				
Good	8	31	11	73	19	46	5,3	0,02
Less	18	69	4	27	22	54		
Total	26	100	15	100	41	100		

Based on Table 3, it shows that respondents who experienced perineal wound healing in the healed category were 26 people with 8 people (31%) good nutritional status and 18 people (69%). While respondents who experienced healing of perineal wounds in the non-healing category were 15 people with good nutritional status as many as 11 people (73%) and poor nutritional status as many as 4 people (27%).

Based on the results of the chi square statistic test, the p value = 0,02 with a (0,05). The OR value of 5,3 means that mothers who have poor nutritional status will have a 5,3 times greater risk of not

Based on table 1, it can be seen that most of the respondents had poor nutritional status, namely 22 respondents (54%), while at least 19 respondents (46%).

Perineal wound healing variables were categorized into two, namely healed and not healed. The healing time limit used is 10 days.

Table 2.
Frequency Distribution Based on Healing of Postpartum Perineal Wounds at Jetis Health Center Yogyakarta 2019

Perineal Wound Healing	n	%
Not Healed	26	63%
Healed	15	37%
Total	41	100%

Based on table 2, it can be seen that the majority of respondents did not experience healing of perineal wounds as many as 26 people (63%), while respondents who experienced perineal injuries were 15 people (37%).

experiencing perineal wound healing than mothers who have good nutritional status. This value shows p value $< \alpha$, so the conclusion is that there is a significant relationship between nutritional status and perineal wound healing in postpartum mothers at the Jetis Health Center.

3. Discussion

The results of the analysis show that there is a relationship between nutritional status and the perineal wound healing process. From the attached calculation, the p-value is 0,02, which means p-value $< 0,05$, then H_0 is rejected and H_a is accepted, which means there is a

relationship between the two variables. This is in accordance with the theory which states that if the nutritional status of the patient is good, the wound healing will also be good.

The results of this study are the same as those of [7], which concluded that there is a relationship between postpartum mothers' attitudes towards balanced nutrition and perineal wound healing. The results of this study are also in accordance with research conducted by [8], which states that nutritional intake affects the perineal wound healing process. Nutritious food and appropriate portions will accelerate the healing of perineal wounds.

Based on the results of the study, it was shown that there were still respondents with poor nutritional status who had LILA < 23,5 cm. According to [9], normal LILA size is 23,5 cm. The LILA measurement can be used to determine the risk of chronic energy deficiency (KEK) so that it can determine a person's nutritional status.

Nutritional status can be related to the healing of perineal sutures because postpartum women require additional nutrients that are much higher than usual conditions for energy recovery and for healing of perineal sutures.

This is in accordance with the theory put forward by [8], that nutritional needs during the puerperium will increase because it is for breastfeeding purposes and for the healing process after giving birth, especially if you have perineal suture injuries. So it is recommended to consume a balanced diet containing elements, such as sources of energy, builders, regulators and protectors [10].

Nutritional status is one of the factors that directly affect a person's health condition which is influenced by the consumption of food that is not in accordance with the body's needs both in quantity and quality [11]. If the nutrients needed are not sufficient, it will affect the wound healing process, increase susceptibility to infection, contribute to an increased incidence of complications and

will result in longer treatment. Undernutrition status occurs when the body experiences a deficiency of one or more essential substances continuously for a long time [12].

Malnutrition, especially protein, greatly affects the wound healing process. Protein is needed for wound healing and for rebuilding various body tissues that undergo changes after undergoing surgery [13]. Sources of protein can be obtained from vegetable protein. Animal protein is a perfect protein, which is a protein that contains complete essential amino acids [14]. Whereas vegetable protein is an imperfect type of protein because it does not contain essential amino acids or its essential amino acid content is so low that it is considered unable to guarantee various growth needs and maintain the life of various tissues in the body. Animal protein, among others, is found in eggs, meat, fish, shrimp, milk, and cheese. While vegetable protein is widely contained in tofu, tempeh, beans, corn and others [16].

According to the researcher's assumption, nutritious and appropriate food keeps the mother in good health and accelerates the healing process of perineal wounds [17]. Poor nutritional status affects the immune system which protects against infectious diseases.

CONCLUSION

Based on the results of the chi square statistic test, the p value = 0,02 with alpha (0,05). The OR value of 5,3 means that mothers who have poor nutritional status will have a 5,3 times greater risk of not experiencing perineal wound healing than mothers who have good nutritional status. This value shows p value < α , so the conclusion is that there is a significant relationship between nutritional status and perineal wound healing in postpartum mothers at Jetis Health Center Yogyakarta.

Suggestions for further researchers are needed research with different methods such as multicenter research in a wider population with different research sites.

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