The Difference in the Length of Healing Process of the Perineal Wound on the Puerperal Mother who Performs Abstinence Food Pattern "TARAK" By Anis Murniati

The Difference in the Length of Healing Process <mark>of the Perineal Wound on the Puerperal Mother</mark> who Performs Abstinence Food Pattern "TARAK"

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ABSTRACT

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Rupture of the perineum is a wound that occurs in the perineum due to labor. The perineal rupture occurs almost in all the first labor and may also occur in subsequent labor. The perineal rupture generally occurs in the midline and may become widespread if the fetal head is born too soon, the pubic arch angle is smaller than usual, the fetal head passes the pelvis of a larger size ⁽²⁴⁾. One of the external factors affecting the healing of perineal wounds of the puerperal mother is the nutritional factor. Community culture during childbirth is still done today, such as postpartum mothers are prohibited from eating eggs, meat, shrimp, sea fish, catfish, fruits and oily food. In postpartum period, the mother should only eat tofu, tempe, mother is prohibited from eating and drinking because according to ancestral heritage that eating too much and drinking can make wet, itchy and long healed. Nutrition is an important component for wound healing process especially proteins needed for cell regeneration. This study aims to determine the relationship of abstinence pattern of feeding in a postpartum period to the process of perineal wound healing. The research design used comparation. The population are all postpartum mother with 2 degree perineal laceration in Working Area Bunda Medika Karangrejo clinic by using purposive sample technique with 50 respondents divided into 2 groups that is group of abstinence and group not eat abstinence. Data collection using questionnaires and observation sheet of wound healing. Then the data is analysed with unpaired t-test statistics. The statistical results show that there is a difference in the duration of wound healing of the perineal wound between postpartum who performs a pattern of abstinence and no abstinence pattern, indicated by sig (2-tail) = 0,000. It is expected that health workers must give education to families and mothers not to abstain from certain feeding after delivery which aims to accelerate the process of maternal wound healing and the fulfillment of balanced nutritional and nutritional needs.

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I. INTRODUCTION

Perineal rupture is a laceration that occurs when the baby is born either spontaneously or by a. midwifery action. Perineal rupture generally occurs in the midline and may expand if the fetus is born too soon. Perineal rupture occurs in almost all primiparas (1). The postpartum period is the period after childbirth and childbirth, placenta, and the membranes needed to restore the pregnant organs such as before pregnancy with approximately 6 weeks. Postpartum care is necessary to accelerate the recovery of the mother's condition. Postnatal care includes early mobilization, lactation, hygiene, and rest, and also good nutrition. Good nutrition will accelerate cell regeneration and accelerate wound healing.

The physiological processes of wound healing can be divided into four major phases: inflammation, destruction, proliferation and maturation. Factors affecting the wound healing process include (1) Oxygen supply, the need for oxygen in the wound is large enough, large O2 supplies in the wound area can accelerate wound healing. (2). adequate wound care (3) Immunity, Decreased immune system against infection, immune system disorders and chronic infections will slow the healing. (4) age, (5) Psychological factors and (6) Nutrition, Protein needs and calories of patients almost become higher than normal people when there are large injuries. Amino acids are needed for the synthesis of structural proteins such as collagen and to synthesize proteins that play a role in the immune response (2).

Community culture during childbirth is still done today, such as postpartum mothers are prohibited from eating eggs, meat, shrimp, sea fish, catfish, fruits and oily food. After delivery, the mother should only eat tofu, tempe, etc. Mother is prohibited from much eating and drinking because according to ancestral heritage that eating too much and drinking can make wet, itchy and long healed. Nutrition is an important component for wound healing process especially proteins needed for cell regeneration. Trust, value, and practice in society greatly affect the behavior of the community (3). Inherited culture is a culture that has been owned by the older generation of the father and mother, bequeathed to their children, among others, in behavior, language, and advice and prohibitions including abstaining from eating culture to puerperal mother.

Currently, there is still a lot happening in some circles of mother that is 53% postpartum mother still do tarak or abstinence consume certain food. This abstinence-eating culture affects to the healing process of the perineal wound. The prevalence of mothers receiving perineal stitches was 57% (28% due to episiotomy and 29% due to spontaneous tear). The incidence of maternal women with perineal rupture in Indonesia in the 25-30 year age group is 24% and at the age of 32-39 years is 62% (4). In Indonesia of postpartum data, 89% of total postpartum women have a habit of abstinence. According Litbangkes data (2015), in East Java data of postpartum 60% do abstinence and 32% postpartum mother do not abstain food. The high rate of abstinence eating done by postpartum mother is the cause of the duration of perineal wound healing due to labor and delay lactation process. Abstinence of food that often occurs for example is prohibited from eating meat, eggs and chicken (53.5%), vegetables and spinach (12.4%), abstinence with hot food (6.3%), and restrictions on marine fish (27, 8%).

The impact of postpartum abstinence behavior is lack of nutrients, so wound healing will be longer, even infection can occur. Especially in postpartum mothers desperately need nutritious food to restore the condition, accelerate wound healing and lactation process. If postpartum nutrition can be met well the perineal suture wound can heal quickly and the mother can immediately work on daily activities. The alternative solution to reduce the culture of abstinence during the puerperium is by providing information to the mother about the impact of abstinence food during childbirth, involving health workers and community cares on training and counseling abstinence. Based on the background, the researchers are interested to conduct research with the title "The difference in the process of perineal wound healing in postpartum women who do the pattern of abstinence with no pattern of eating abstinence"

II. METHOD

The design of this study is comparative. Population used by all postpartum mothers with second degree perineal laceration in the Working Area Bunda Medika Karangrejo clinic. The sample in this research is partially postpartum mother with second degree perineal laceration in Working Area Bunda Medika Karangrejo clinic. The sample in this study using purposive sampling. The data collection pattern of abstinence using questionnaire instrument to know the pattern of abstinence puerperal mother. As for the duration of perineal wound healing process done by observing the wound healing process from day to day using several observation parameters that include five kinds of criteria that is (wound area, scent, wound secretion, granulation, and stitches wound). The perineal wound to be said to be healed if of all criteria must obtain a value of 4 or a total sum of 20. Wounds of <10mm (value 4), odorless scent (value 4), dry wound secretion (value 4), full wound granulation (value 4), and stitches close (value 4).

This research was conducted for 4 months in Working Area Bunda Medika Karangrejo clinic. Data analysis using SPSS (Statistic Product and Service Solution) type of test statistic unpaired t-test. If ρ value <0.05 is said to be significant and the null hypothesis (H0) is rejected, then H1 is accepted which means there is a difference in the length of healing process of the perineal wound on the puerperal mother who performs abstinence of any kinds of food and non abstinence.

III. RESULTS AND DISCUSSION

1. Result

a. The duration of the perineal wound healing process

Table 2. Average and standard deviation duration of perineal wound healing process in postpartum women who do the pattern of abstinence and not abstinence in the Working Area Bunda Medika Karangrejo clinic

	Type of diet	N	Mean	Std. Deviation
long days of wound healing	Abstinence of food	25	9.12	1.301
	Not abstinence of food	25	7.36	.952

Based on table 2 it is known the average length of wound healing days perineum on postpartum women who do the pattern of abstinence is 9.12 days while in postpartum mothers who do not abstain from eating 7.36 days.

b. Statistic analysis

The result of statistical test using unpaired t-test by using $\alpha = 0.05$ got p value = 0.000 this means p value $<\alpha$ then H0 is rejected means there is difference of long process of perineal wound healing on postpartum mother who do abstinence without eating abstinence.

2. Discussion

From the results of this study in table 1 shows, that from 50 respondents who are divided into 2 groups there are differences in the duration of perineal wound healing. In the group of postpartum mothers who abstain from eating (tarak) the average length of wound healing day 9.12 days, whereas in the group of postpartum mothers who do not abstain (tarak) the average length of wound healing days 7.36 days.

Foods or dietary restrictions are habits, cultures or suggestions that are not allowed to consume certain types of foods such as vegetables, fruits, fish and are usually associated with the recovery of physical conditions such as those that can affect milk production, some foods are prohibited as they may affect health baby (5). In postpartum women according to the existing culture is usually prohibited from eating eggs, meat, shrimp, sea fish, catfish, fruits and oily foods. After delivery, mothers can only eat tofu, tempeh, mother is prohibited to eat and drink because according to research and development of science and technology, have good nutrition.

From the results of this study found the difference of wound healing days on postpartum mothers who never eat and not abstinence, the mother abstinence to eat the average length of wound healing days longer ie 9.12 days. The intake of good nutrition and enough is very necessary to be given to postpartum mother, that is by giving high-calorie food and protein plus vitamin C can accelerate healing of perineal wound. The culture of abstinence leads to less maternal nutrition so that wound healing becomes longer (6, 7).

The result of statistical test using unpaired t-test by using $\alpha = 0.05$ got p value = 0.000 this means p value $<\alpha$ then H0 is rejected means there is difference of long process of perineal wound healing on postpartum mother who do abstinence without eating abstinence. Nutrients are especially necessary protein and calories, to help the wound healing process is required about 1.2-2 g/kg/day. A diet high in protein and calories should be maintained throughout the healing period. The formation of the network will be very optimal when the nutritional needs, especially proteins are met. Other nutrients that are also indispensable in the healing process are vitamin C and zinc. Vitamin C is needed for the formation of collagen for optimal wound healing while the zinc increases the strength of the tension (the force required to separate the edges) of wound healing (2,8).

Feeding high-calorie and protein foods can help to accelerate the growth of tissue, and also vitamin C which one of its functions as an anti-oxidant and is very instrumental in the metabolic processes that take place in the body. If the nutritional intake given to the puerperal mother is less then the healing of the perineal wound is slower. High-calorie foods are mostly found in carbohydrate foods such as rice, cassava, potatoes, milk and others, while for high-protein foods can be obtained from the daily side dishes such as fish, chicken, meat, eggs that are animal protein and can also be vegetable protein derived from plants such as green beans, soybeans and others. Nutrition is also needed in wound healing of vitamin C, vitamin C can be obtained with eating fruits every day, such as guava, oranges, papaya, mango and others, this is evidenced from the statistical test with the difference in the average threshold for 1,112 for the group of abstinence and 1,110 for the group did not abstain from eating. While the average value of upper 2.408 for the abstinence group of 2,410 for the group did not abstain from eating. One of the factors that affect the duration of perineal wound healing process is the environment and nutrition. Environmental factors are the support of the family or the nearest person, while the nutrition factor is a balanced nutritious food.

Based on the existing theories and facts, the researchers agree that postpartum mothers who abstain means the necessary nutrients are not met, then the healing will be longer. While the puerperal mother who does not abstain the nutrients are met and the healing process will be faster because the nutrients will be more fulfilled. Nutrient is important because in wound healing, component of nutrient is used to; 1).Fats and carbohydrates are the main source of energy in the wound healing process. Glucose is used to create ATP cells to provide energy used angiogenesis and new tissue deposition. The use of glucose as a source for ATP synthesis is essential in preventing the depletion of other amino acids and protein substrate. 2). Protein is one of the most important nutrients that affect wound healing. Lack of protein can damage capillary formation, fibroblast proliferation, proteoglycan synthesis, collagen synthesis, and wound remodeling. Lack of protein also affects the immune system,

with the result of decreased leukocyte phagocytosis and increased susceptibility to infection. Collagen is a major protein component of connective tissue and consists mainly of glycine, proline, and hydroxyproline. Collagen synthesis requires lysine and proline hydroxylation, and co-factors such as ferrous iron and vitamin C. 3) Arginine is a semi-essential amino acid that is needed during the period of maximum growth, severe stress, and injury. Arginine has many effects in the body, including modulation of immune function, wound healing, hormonal secretion, vascular tone, and endothelial function. Arginine is also a precursor for proline, and, thus, sufficient arginine levels are required to support collagen deposition, angiogenesis, and injury. 4). Glutamine also required metabolic energy for rapidly proliferating cells such as fibroblasts, lymphocytes, epithelial cells and macrophages. Glutamine has an important role in stimulating the inflammatory immune response that occurs early in wound healing. 5). Lipids help meet energy needs and provide important building blocks for wound healing and tissue repair. Polyunsaturated fatty acids (PUFAs), which can not be synthesized de novo by mammals, consist mainly of two families, n-6 (omega-6, found in soybean oil) and n-3 (omega-3, found in fish oil). The effects of omega-3 fatty acids on wound healing are not conclusive. They have been reported to affect the production of pro-inflammatory cytokines, cell metabolism, gene expression, and angiogenesis at wound sites. 6) Vitamin C (L-ascorbic acid), A (retinol), and E (tocopherol) show strong anti-oxidant and anti-inflammatory effects. Vitamin C has many roles in wound healing, and this vitamin deficiency has some effects on tissue repair. Vitamin C deficiency results in impaired healing, and has been associated with decreased collagen synthesis and fibroblast proliferation, decreased angiogenesis, and increased capillary fragility. Also, vitamin C deficiency leads to impaired immune responses and increases susceptibility to wound infections (9).

IV. CONCLUSION

In the group of postpartum mothers who abstain from eating (tarak) the average length of wound healing day 9.12 days, whereas in the group of postpartum mothers who do not abstain (tarak). The average length of wound healing days 7.36 days. There is a difference in the duration of perineal wound healing between postpartum who performs a pattern of abstinence with no abstinence pattern, which is indicated by sig (2-tail) = 0,000.

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