

The Effect Of Green Betel Cook On Pain Reduction And Perineal Wound Healing Process In Postpartum Mothers at BPS Mulyani Perdagangan II village, kec. Bandar. Regency. Simalungun

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ABSTRACT

Infection of the birth canal wound can occur because the mother does not pay attention to good personal hygiene, does not understand how to properly care for perineal wounds, does not understand the benefits and goals of perineal wound care, and is not diligent in carrying out postnatal care. Effect of green betel decoction on reducing pain and healing process of perineal wounds in postpartum women at BPS Mulyani DesaTrading II Kec. city. Regency. Simalungun in 2020. This study used a Quasy Experimental Design research type, with a Post Test Only Control Group design. The population in the study were all postpartum mothers from day 1 to day 10 in April-May at BPS Mulyani DesaTrading II Kec. city. Regency. Simalungun in 2020 as many as 25 people, sample using purposive sampling, with research techniques using the Mann-Whitney U-Test as a hypothesis tester. The results of research on perineal wound healing in the group that was given green betel decoction at BPS Mulyani Trading Village in 2020 were the majority normal, namely 6 respondents (60.0%), 3 respondents fast (30.0%) and only 1 respondent slow (10, 0%). Healing of perineal wounds in the group that was not given green betel decoction at BPS Mulyani DesaTrading in 2020 was mostly slow, namely 6 respondents (60.0%), and normal as many as 4 respondents (40.0%), while there was no fast The conclusion is that there is a significant effect of green betel decoction on reducing pain and the process of healing perineal wounds in postpartum women at BPS Mulyani Perdagangan II Regency. Simalungun in 2020

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1. INTRODUCTION

Perineal wound care is one way to prevent infection of the birth canal wound. Perineal care consists of 3 techniques, namely techniques using antiseptics, without antiseptics and traditional methods. However, many people still treat perineal wounds using traditional methods, one of which is using boiled betel leaf water to clean so that the perineal wound heals quickly and the smell of blood that comes out is not fishy.

Betel leaves contain essential oils consisting of bethephenol, chavicol, sesculterpene, hydroxyvaical, cavibetol, estrogen, eugenol, and karvarool where the biochemical substances in betel leaf (*Piperbetle linn.*) have the power to kill germs and fungi, as well as antioxidants which accelerate the wound healing process. . Treatment using betel leaf is a traditional treatment using certain herbal ingredients and is still natural so that there are no side effects as often occur in chemical treatment [1].

Several things can happen during the puerperium, one of which is a puerperal infection. Puerperal infection is a morbidity and mortality for postpartum mothers. Postpartum care is needed in this period because it is a critical period for both mother and baby. One of the infections that occurs is infection of the birth canal (Saifudin, 2018). Perineal wound care is one way to prevent infection of the birth canal wound. Perineal care consists of 3 techniques, namely techniques using antiseptics, without antiseptics and traditional methods, one of which is using boiled betel leaf water to wash so that the perineal wound heals quickly and the smell of blood that comes out is not fishy.

Antibiotic treatment for perineal wound care currently tends to be avoided. This can be interpreted, as long as the mother is not at risk of infection, the midwife does not give antibiotics to heal perineal wounds. In fact, according to the book Pharmacology and Therapy (2017), some antibiotics should be avoided during lactation, because the amounts are very significant and risky. This is the reason midwives advise postpartum women to use betel leaves as a medicine that speeds up the healing of perineal wounds [2].

Rini Anggeriani's research results (2018) respondents who experienced fast wound healing were also influenced by the nutritional intake obtained by mothers during the postpartum period to restore the mother's physical condition, and also personal hygiene where mothers who diligently change sanitary napkins and carry out proper care using betel leaf water then the wound will dry faster[3]. Likewise with the results of Juita's research (2017) in Kusumaningsih (2017), the factor that influences episiotomy wound healing has the greatest influence is cleanliness [4]. Wound healing management includes controlling inflammation, reducing the number of germs breeding, preventing infection, and dealing with infection. Research conducted regarding the healing of perineal wounds in respondents who used betel leaves tended to be faster than respondents who did not use betel leaves, this was because The chemical content of betel leaves can accelerate the wound healing process.

Lack of mother's knowledge about proper perineal maintenance (vulva hygiene) is one of the causes of infection in the perineum. There are two kinds of vulva hygiene in the treatment of birth canal injuries, namely non-antiseptic treatment, one of which is using traditional medicine using betel leaf decoction (Piper betle). Boiled water from betel leaves can be used to help treat wounds because boiled betel leaves contain chemicals and antibiotics which are of great benefit[5].

The results of a preliminary study at BPS Mulyani Trading Village II Kec. city. Regency. Simalungun is one of the BPS that supports the MMR and IMR reduction program, by opening Ante Natal Care (ANC) services, 24-hour delivery to family planning. The number of pregnancy visits during February 2020 to April reached 80 pregnant women, normal deliveries reached 8 mothers, 6 of whom experienced perineal stitches. Of the 6 mothers who had perineal stitches, 3 of them experienced slow healing of perineal wounds which took 10 days due to nutritional patterns that still followed the tradition of ngadem and improper hygiene patterns.

2. METHOD

This research is using experimental method. The experimental method is a research method that tests hypotheses in the form of a causal relationship through the manipulation of the independent variables and tests the changes caused by the manipulations. The experimental method used was Quasy Experimental Design (pseudo-experimental design) with a Post Test Only Control Group (Sudrajat, 2018). In this study the population was all postpartum mothers from day 1 to day 10 in April-May in BPS Mulyani Perdagangan II Regency. Simalungun in 2020 as many as 25 people. The sample in this study were all postpartum mothers who met the predetermined criteria for purposive sampling, and in the April-August 2020 period at BPS Mulyani Perdagangan in 2020, there were 20 people, of which 10 people were treated for the perineum using betel leaf boiled water, and 10 people were not treated for the perineum using betel leaf boiled water. In this study the authors used a type of structured observation instrument. Data were analyzed using multivariate statistical tests with two variables. The scale of this study is nominal ordinal, so the researcher chose the Mann-Whitney U-Test as a hypothesis tester.

3. RESULTS AND DISCUSSION

Univariate analysis

Characteristics of respondents

The characteristics of respondents at BPS Mulyani Perdagangan II in 2020 in this study were grouped by age. The characteristics of the respondents are described in table 1 as follows:

Table 1. Characteristics of Respondents at BPS Mulyani Perdagangan in 2020

No	Demographic Data	Treatment Group		Control Group	
		Frekuensi	Presentase (%)	Frekuensi	Presentase (%)
1	Age				
	<25 years	2	20,0	1	10,0

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25-35 years	7	70,0	7	70,0
>35 years	1	10,0	2	20,0
Amount	10	100	10	100

Based on table 1, the majority of postpartum mothers who were the majority respondents were aged 25-35 years, with 7 respondents (70.0%) in both the treatment group and the control group.

Healing of Perineal Wounds in the Group Given Green Betel Stew

Data on perineal wound healing in the group that was given green betel decoction at the BPS Mulyani Perdagangan II in 2020 can be seen in the table 2 follows:

Table 2 Healing of Perineal Wounds in Groups Given Green Betel Stew at BPS Mulyani Perdagangan II in 2020

Perineal Wound Healing	Frekuensi	%
Fast	3	30,0
Normal	6	60,0
Slow	1	10,0
Amount	10	100

Based on table 2, it shows that the majority of perineal wounds were healed in the group that was given green betel decoction at BPS Mulyani Perdagangan II in 2020, the majority were normal, namely 6 respondents (60.0%), 3 respondents fast (30.0%) and only 1 respondent slow (10.0%).

Perineal Wound Healing in Groups Not Given Green Betel Stew

Data on perineal wound healing in the group that was not given green betel decoction at the BPS Mulyani Perdagangan II in 2020 can be seen in table 3 below:

Table 3 Healing of Perineal Wounds in Groups Not Given Green Betel Stew at BPS Mulyani, Perdagangan II in 2020

Perineal Wound Healing	Frekuensi	%
Fast	0	0,0
Normal	4	40,0
Slow	6	60,0
Amount	10	100

Based on table 3, it shows that the majority of perineal wound healing in the group that was not given green betel decoction at BPS Mulyani Perdagangan II in 2020 was slow, namely 6 respondents (60.0%), and normal as many as 4 respondents (40.0%), while those who no fast.

The effect of green betel decoction on reducing pain and the process of healing perineal wounds in postpartum women at BPS Mulyani Perdagangan II 2020

Bivariate analysis in this section presents the results of the Influence analysis Green betel decoction on reducing pain and the process of healing perineal wounds in postpartum women at BPS Mulyani, Perdagangan II in 2020, to find out this difference, the Mann Whitney test was carried out. This is because the data used is ordinal (categorical), so the test must use a non-parametric statistical test in this case using the Mann Whitney test.

Table 4. The effect of green betel decoction on reducing pain and the process of healing perineal wounds in postpartum women at BPS Mulyani Perdagangan II in 2020

Group	N	Mean Rank	Z	p-value
Given Green Betel Stew	10	7,40	-2,571	0,019
Not Given Green Betel Stew	10	13,6		

Total20

Based on the Mann Whitney test as presented in table 4, it is obtained that the calculated Z value = -2.571 with p-value = 0.019, because the p-value (0.019) < α (0.05), it is concluded that there is a significant effect of green betel decoction on reducing pain and the healing process of perineal wounds in postpartum women at BPS Mulyani Perdagangan II in 2020.

Discussion

The process of healing perineal wounds in postpartum mothers at BPS Mulyani, Perdagangan II in 2020

The results showed that the frequency distribution in the group given green betel decoction perineal wound healing in postpartum mothers was the majority fast as much as 6 people (60%), and the minority slow as much as 1 person (10%).

This research is in line with previous research conducted by Sri Yuniarti and Lies Mulyati (2014), entitled The Effect of Consuming Betel Leaf Extract (*Anredera Cordifolia* (Tenore) Steen) on the Perineal Wound Healing Time in Post Partum Mothers at Dr. Hasan Sadikin Bandung Period July 2014. The type of research is Quasi Experiment with post test only control group. The sampling technique in this study was non-probability sampling with consecutive sampling with 40 respondents.

The results showed that the healing time for perineal sutures in post partum mothers who did not consume green betel leaf extract experienced slow healing, namely 90%, while those who consumed green betel leaf extract almost all experienced fast healing, namely 85% with a P value (0.000).) < (0.05). research is that there is a significant effect of consuming green betel leaf extract on the duration of perineal wound healing. Green betel leaf extract is an alternative to accelerate perineal wound healing. The difference with the research that the researcher is currently carrying out lies in the title, research location, method used, research variables and number of respondents. (Mulyati, 2014)

Healing is a process, method, act of healing, recovery. Wounds are damage to the unity/component of the tissue, where specifically there is a damaged or missing tissue substance. So healing a wound where the face of the fetus has a long recovery time on the skin due to damage or the integrity of the skin tissue. Perineal wounds are injuries that occur as a result of delivery to the perineum where the fetal face is facing. An episiotomy is a perineal incision that goes downwards starting from the vulvar ring downwards, avoiding the anus and sphincter muscles and cutting the pelvic fascia, vaginal constrictor muscles, transversus perineal muscles and sometimes being cut by fibers from the levator ani muscle. The tear rupture occurs in almost 4 stages, namely the inflammatory stage, the destructive stage, the proliferative stage, and the maturation stage. The inflammatory stage begins at the time of injury. The destructive stage of this stage is the cleaning of dead tissue by polymorphonuclear leukocytes and macrophages. The proliferative stage in this phase occurs the growth of new tissue through the process of: Granulation, Wound contraction, Epithelialization, the maturation stage that is after epithelialization is complete, the new tissue undergoes a process of matures when it undergoes "remodeling" to increase the tensile strength of scar tissue, mature tissue is avascular and does not contain sweat glands or fat glands or hair. At this stage, re-epithelialization of wound contraction and connective tissue organization occurs. (Purnama, H.2015)

The postpartum period (puerperium) begins after the birth of the placenta and ends when the uterine organs return to their pre-pregnancy state, the puerperium lasts for about 6 weeks. A woman wants the birth canal to return to its pre-pregnancy state and give birth quickly because prolonged pain can interfere with activities and comfort. Based on the results of this study the process of accelerating perineal wound healing is caused by several factors which include environment, tradition, knowledge, socio-economic, handling of staff, maternal condition, nutritional status, age, tissue handling, haemorrhagi, hypoveleria, local oedema factors, nutritional deficits, personal hygiene, oxygen deficit, medical, and over activities. Normally the wound can heal for 6-7 days if a mother can take good care of it, otherwise if the wound is not cared for properly then the wound healing process takes longer and can cause infection (Kurniarum, A, 2014).

Almost every normal delivery through the birth canal results in trauma to the vaginal tissues and mucosa due to the pressure of the hard part having to bias the fetus. A woman wants the birth canal to

return to its pre-pregnancy state and feel comfortable. So that a postpartum mother must be able to maintain cleanliness, especially in the genital area.

According to the researchers' assumption that perineal wound healing in respondents who were given green betel leaf decoction was faster than respondents who were not given it, this was due to the chemical content of green betel leaves which could speed up the healing process. Perineal wound healing is fast because there are several influencing factors such as age, healthy reproductive age is the age of 20-35 for a woman to get pregnant and give birth, and nutritional factors, nutrients that contain protein will increase the body's immunity.

The effect of green betel decoction on reducing pain and the process of healing perineal wounds in postpartum women at BPS Mulyani Perdagangan II in 2020

Giving betel leaf boiled water is one of the risk factors effect on perineal wound healing in postpartum mothers. This is indicated by a significance value of $p = 0.019$ ($p < 0.05$). Betel leaves are used for the treatment of various types of diseases such as typhus, ulcers, colitis and hemorrhoids as well as to heal internal and external wounds after surgery. Green betel leaves can also be used to treat swelling and blood clots, restore weak conditions after illness, rheumatism, bruised wounds, gout and prevent strokes.

The properties of these leaves can be used for the treatment of various types of diseases such as stones/vomiting blood, lungs/holes, diabetes, shortness of breath, acute (chronic) ulcers, broken bones, low blood pressure, inflammation of the kidneys, itching/skin eczema, mild/severe concussion, dysentery/diarrhea, bleeding hemorrhoids, nosebleeds, postoperative/surgical wounds, burns, accidents/sharp objects injuries, acne, swollen intestines, bleeding gums, lack of appetite, irregular menstruation, healing after childbirth/birth, maintaining body stamina, heating the body, impotence, cancer, and so on.

This research is in line with the research of Kartika Wijayanti (2016), who examined "The Effectiveness of Green Betel Leaf Decoction Water on Perineal Wound Healing at the Aesya Grabag Maternity Hospital, Magelang Regency". The results showed that there was a significant difference in perineal wound healing after being given the intervention of green betel leaf boiled water and bethadine. The percentage of respondents who experienced perineal wound healing in the green betel group was better than the bethadine group. (Wijayanti, 2016).

This research is also in line with the research of Sri Yuniarti and Lies Mulyati (2014), who examined the Effects of Consuming Green Betel Leaf Extract (*Anredera Cordifolia* (Tenore) Steen) on the Perineal Wound Healing Time in Post Partum Mothers at Dr. Hasan Sadikin Bandung. The results showed that the healing time for perineal suture wounds in post partum mothers who did not consume green betel leaf extract experienced slow healing, namely 90%, while almost all those who consumed green betel leaf extract experienced rapid healing.

Factors that can affect wound healing are healthy reproductive age is 20-35 years old. Intact skin in healthy young adults is a good barrier against mechanical trauma as well as infection, as well as efficiency of the immune system, cardiovascular system and respiratory system which allows faster wound healing. The speed of cell repair takes place in line with the growth or maturity of a person's age. Nutritional factors can also affect wound healing, especially nutrients that contain protein, which will increase the repair of damaged cells and increase the body's immunity. This is in accordance with the function of protein, namely as a substance for the formation of antibodies. Nutrition that contains carbohydrates plays an important role in meeting energy needs during the wound healing process and prevents protein and fat from carrying out catabolism. Environmental factors, socio-cultural factors, traditions, social and many other factors that can affect wound healing.

According to the researchers' assumption that post partum mothers who consume boiled water of green betel leaves mostly experience a faster healing process of perineal wounds. This is because the green betel plant contains an antiseptic that can kill germs and can increase resistance to infection and accelerate wound healing. The mother's health condition, both physically and mentally, can lead to prolonged healing.

4. CONCLUSION

Based on the description of the research results and discussion, it can be concluded that the healing of perineal wounds in the group given green betel decoction at BPS Mulyani Perdagangan II in 2020 was normal, namely 6 respondents (60.0%), fast as many as 3 respondents (30.0 %) and slow only 1 respondent (10.0%). The majority of perineum wound healing in the group that was not given green betel decoction at BPS Mulyani Perdagangan II in 2020 was slow, namely 6 respondents (60.0%), and normal as many as 4 respondents (40.0%), while there were no fast ones. There is a significant effect of green betel decoction on reducing pain and the process of healing perineal wounds in postpartum women at BPS Mulyani Perdagangan II Regency. Simalungun in 2020, with a p value $(0.019) < \alpha$ (0.05) . These results prove that green betel decoction has a positive effect on accelerating perineal wound healing.

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