ABSTRAK


Hasil Rata-rata lama penyembuhan luka perineum ibu nifas yang diberi air rebusan daun sirih merah dengan rerata 5,137 hari Min 3 Max 7. Luka perineum pada ibu nifas yang tidak diberi air rebusan daun sirih merah dengan rerata 7, 20 hari Min 6 Max 9. Hasil uji statistik diperoleh P-value = 0,001 (<0,05).


Saran Diharapkan hasil penelitian ini dapat dijadikan sebagai salah satu asuhan di PMB dengan memberikan penyuluhan perawatan luka perineum menggunakan air rebusan daun sirih merah pada ibu hamil trimester III. Harapan utama setelah diberikan penyuluhan adalah ibu nifas bersedia mencuci perineum menggunakan air rebusan daun sirih merah untuk mempercepat penyembuhan luka perineum.

Kata kunci : Rebusan Daun Sirih Merah, Luka Perineum, Ibu Nifas

ABSTRACT

Background Maternal mortality in Indonesia is generally caused by several factors. First, perineal wound is a perineal wound due to a tear in the birth canal either due to rupture or due to an episiotomy. The results of the pre-survey at BPM Wirahayu, S.Tr.Keb in Panjang District, Bandar Lampung City in the last 3 months, namely in October, November, and December 2020, there were 73.8% of deliveries with perineal injuries. The risk of infection in postpartum mothers is to treat perineal wounds by giving boiled water of red betel leaf. The purpose of this study was to determine the effect of washing red betel leaf boiled water in accelerating the healing of postpartum mothers' perineal wounds at BPM Wirahayu, S.Tr.Keb in 2021.

Methods Types of quantitative research. With a Quasy experimental research design with a two group pretest posttest design approach. The population in this study were postpartum mothers at BPM Wirahayu, S.Tr.Ke as many as 30 respondents, purposive sampling technique, univariate and bivariate data analysis using man witney.

Result The average duration of perineal wound healing for postpartum mothers who were given red betel leaf boiled water with a mean of 5,137 days Min 3 Max 7. Perineal wounds for postpartum mothers who were not given red betel leaf boiled water with a mean of 7,20 days Min 6 Max 9. Results statistical test obtained P-value = 0.001 (<0.05.)
Conclusion there is an effect of washing red betel leaf boiled water in accelerating the healing of postpartum mothers’ perineal wounds at BPM Wirahayu, S.Tr.Keb in 2021.

Suggestion It is hoped that the results of this study can be used as one of the cares at PMB by providing counseling for perineal wound care using boiled water of red betel leaf in third trimester pregnant women. The main hope after being given counseling is that postpartum mothers are willing to wash the perineum using boiled water of red betel leaf to accelerate the healing of perineal wounds.

Keywords : Decoction of Red Betel Leaf, Perineal Wounds, Postpartum Mother

INTRODUCTION
Perineal wound is a perineal wound due to a tear in the birth canal either due to rupture or due to an episiotomy during delivery of the fetus (Walyani ES, 2020).

According to the World Health Organization (WHO) in 2014, there were 210 million pregnant women, and 130 million births worldwide.

It is estimated that 558,000 mothers die every year due to complications of pregnancy and childbirth, 35% of them die because of bleeding.

The main causes of bleeding in labor are retained placenta, uterine atony, infection of the perineum and rupture of the perineum remnants of the placenta that are not treated immediately (MOH) RI, 2014.

In Indonesia, the Maternal Mortality Rate (MMR) is still quite high, according to the 2012 Indonesian Demographic and Health Survey, which was 359/100,000 live births, while the target for maternal mortality in 2013 was 102/100,000 live births.

The main causes of maternal death in Indonesia are bleeding (27%), eclampsia (23%), infection (11%), abortion (5%), prolonged labor (5%), obstetric embolism (3%), puerperal complications (8%), and others (11%) (IDHS 2012).

The Maternal Mortality Rate (MMR) in Lampung Province in 2019 was 111 people out of 150,245 live birth mothers. The causes of maternal death in Lampung Province are bleeding (29%), hypertension in pregnancy (31%), infection (3%), disorders of the blood circulatory system (4%), metabolic disorders (1%), and others (43%). (Lampung Provincial Health Office, 2019)

One of the efforts that can be done to prevent the risk of infection in postpartum mothers, one of which is to treat perineal wounds by giving boiled water of red betel leaf. Perineal wound care that is done properly can accelerate the healing of perineal wounds (Siagian, 2020).

Red betel is one type of the many medicinal plants found in Indonesia. There are lots of phytochemical compounds found in red betel plants, namely flavonoids, saponins, tannins and essential oils (Hidayat, 2019).

In addition, there are chemical constituents in red betel leaf including hydroxykavicol, kavikol, cavibetol, allyprokatekl, karvakol, eugenol, pcymene, cineole, caryofelen, estragol cadmium, terpeneme, and phenyl propada.

Karvakol contained in betel leaf is a disinfectant or antifungal so that it can be used as an antiseptic to remove bad breath and discharge. Eugenol can reduce pain, but most of the essential oils have strong antibacterial and antifungal properties. Betel also contains arecoline in all parts of the plant, this substance can function to stimulate the central nervous or thinking power, and also serves to increase peristalsis.

Thus, blood circulation in the wound becomes smoother, oxygen becomes more abundant, this can affect wound healing faster (Damarini, 2013).

RESEARCH METHODOLOGY
The type of research used in this research is quantitative. This type of research is a type of research to get an accurate picture of the characteristics of a problem that classifies a data and retrieval of data related to numbers, both those obtained from measurement results or the value of a data obtained. obtained. (Notoatmodjo, 2018).

In this study using the Quasi Experimental method with a two group pretest posttest design approach, in a simple experimental design there are two groups. The first group acted as the control group and the intervention group.

The sample in this study was the average postpartum mother who experienced perineal injuries at BPM Wirahayu S,Tr.Keb. as many as 30 respondents who were divided into 2 groups, namely the experimental group and the control group. Each group amounting to 15 people. 15 respondents in the experimental group were given treatment, namely giving boiled water of red betel leaf and also antibiotics in postpartum maternal perineal wound healing while in the control group there were 15 respondents who were only given antibiotics for postpartum maternal perineal wound healing.
In the intervention group, red betel leaf boiled water was given 200 ml each in the morning and evening to wash the postpartum mother's perineal wound, this red betel leaf boiled water was given for 7 days with 2 uses. In a day that is after bathing in the morning and also in the evening. Next, the perineal wound will be treated observations on days 3, 5, 7 and 9 to see how long does perineal wound heal? in the intervention group and the control group, observations were made by assessing the REEDA scale which included Redness, Edema, Ecchymosis, Discharger, and Approximation. If the REEDA scale score is 5, the postpartum mother's perineal wound is declared healed. Furthermore, the results of observations are attached to the observation sheet.

RESEARCH RESULTS

Normality Test

Based on table 1, it is known that the p value > from 0.05 then the distribution is normal. If the p value < 0.05 then the distribution is not normal, the p value in the intervention and control groups is equal to 0.022 and 0.008 < 0.05 then the data is not normally distributed and then the experimental test is carried out with the Man Witney test.

<table>
<thead>
<tr>
<th>Healing Wound</th>
<th>Shapiro-Wilk Statistics</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>0.891</td>
<td>15</td>
<td>0.022</td>
</tr>
<tr>
<td>Control</td>
<td>0.915</td>
<td>15</td>
<td>0.008</td>
</tr>
</tbody>
</table>

Tabel 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group Intervention</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>F</td>
<td>Percents</td>
</tr>
<tr>
<td>&lt; 20 and &gt; 35 Year</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>20 – 35 Years</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multipara</td>
<td>7</td>
<td>46.8</td>
</tr>
<tr>
<td>Primipara</td>
<td>8</td>
<td>53.2</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Housewife</td>
<td>9</td>
<td>60.0</td>
</tr>
<tr>
<td>Civil Servant</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Farmer</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S1</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Senior High School</td>
<td>10</td>
<td>66.7</td>
</tr>
<tr>
<td>Junior High School</td>
<td>4</td>
<td>26.7</td>
</tr>
</tbody>
</table>

Based on table 2 above, it can be seen that the age of the respondents in the intervention and control groups is mostly age (20-35 years) as many as 23 respondents (76.6%), education in the intervention group SMA 10 respondents (66.7%) and the control group SMA 8 respondents (53.3%), occupation in the intervention group housewives 9 respondents (60.0%) and control group housewives 8 respondents (53.3%), parity in the primipara intervention group 8 respondents (53.3%) and the primiparous control group 9 respondents (60.0%).

Average Length of Wound Healing Postpartum Mother Perineum Given Washing Red Betel Leaf Decoction

From the table above, it can be seen that the average length of healing for postpartum mothers' perineal wounds given boiled water from red betel leaf at BPM Wirahayu, S.Tr.Keb in 2021 with a mean of 5,137 days Min 3 Max 7.
From the table above, it can be seen that the average length of healing for postpartum mothers’ perineal wounds who were not given red betel leaf boiled water at BPM Wirahayu, S.Tr.Keb in 2021 with Mean 7,20 days Min 6 Max 9.

**DISCUSSION**

**Univariate Analysis**

**Average Duration of Healing Perineal Wounds for Postpartum Mothers Given Red Betel Leaf Decoction Water**

Average duration of maternal perineal wound healing postpartum who was given water with boiled red betel leaf at BPM Wirahayu, S.Tr.Keb in 2021 with a mean of 5,137 days Min 3 Max 7.

In line with Walyani's theory (2015) the perineum is the tissue between the vulvar vestibule and the anus and is approximately 4 cm long. Perineal wound is a perineal wound due to a tear in the birth canal either due to rupture or due to an episiotomy during delivery of the fetus. Perineal rupture is a tear that occurs in the perineum during childbirth. A birth canal tear is an irregular wound or tissue tear (Walyani, 2015).

In line with research conducted by Nurul Aini Siaga et al, 18 respondents carried out proper perineal care by giving boiled water of red betel leaf which then healed perineal wounds faster on average 3.00 ± 1.372 or 2-5 days for the healing process. This is faster healing compared to 18 respondents who were only given antibiotics, the average perineal wound healing was 5.28 ± 0.958 or about 3-6 days.

According to researchers perineal wound is influenced by several factors, such as the baby's weight at birth, such as the baby's weight is more, episiotomy is done. Based on the results of research conducted by researchers, the occurrence of perineal injuries in 15 mothers was due to large baby weight, and a history of primigravida delivery.

Episiotomy is an incision in the perineum that causes the vaginal mucous membrane to cut, the blood membrane ring, the tissue in the rectovaginal septum, the muscles and the perineum and the skin in front of the perineum (Walyani, 2015).

The average wound healing in the intervention group using boiled water of red betel leaf with a duration of 5 days, this shows that red betel leaf decoction is efficacious in accelerate wound healing. Red betel leaf contains antiseptic and the main component of essential oil consists of phenol and its derivative compounds. One of the derivative compounds is kavikol which has a bactericidal power of five times stronger than canphenol. The antibacterial power of betel leaf essential oil is caused by the presence of kavikol compounds that can denature bacterial cell proteins.

**Average Duration of Healing of Perineal Wounds for Postpartum Mothers Who Are Not Given Washing Red Betel Leaf Decoction Water**

Average duration of maternal perineal wound healing postpartum who were not given red betel leaf boiled water at BPM Wirahayu, S.Tr.Keb in 2021 with Mean 7,20 days Min 6 Max 9.

In line with Fatimah's theory (2020) Treatment that can be done for a torn birth canal is to give antibiotic therapy after giving birth. The benefit of giving this drug is to prevent infection in postpartum mothers. Perineal wound care in mothers is useful for reducing discomfort, maintaining cleanliness, preventing infection and accelerating wound healing. Perineal care generally coincides with vulvar care.

In line with research conducted by Nurul Aini Siaga et al, as many as 18 respondents carried out proper perineal care by giving boiled water of red betel leaf which then healed perineal wounds faster on average. 3.00 ± 1.372 or 2-5 days of the healing process. This is faster healing compared to 18 respondents who were only given antibiotics, the average perineal wound healing 5.28 ± 0.958 or about 3-6 days.

Perineal wound care is the fulfillment of the need to nourish the area between the thighs which is limited by the vulva and anus in mothers who are in

<table>
<thead>
<tr>
<th>Wound Perineum</th>
<th>N</th>
<th>Mean</th>
<th>Min-Max</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Healing</td>
<td>15</td>
<td>5.13</td>
<td>3-7</td>
<td>1.589</td>
<td>0.413</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wound Perineum</th>
<th>N</th>
<th>Mean</th>
<th>Min-Max</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Healing</td>
<td>15</td>
<td>7.20</td>
<td>6-9</td>
<td>1.146</td>
<td>0.296</td>
</tr>
</tbody>
</table>

**Tabel 4**

**Table 4**

<table>
<thead>
<tr>
<th>Wound Perineum</th>
<th>N</th>
<th>Mean</th>
<th>Min-Max</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Healing</td>
<td>15</td>
<td>5.13</td>
<td>3-7</td>
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</tr>
<tr>
<td>Long Healing</td>
<td>15</td>
<td>7.20</td>
<td>6-9</td>
<td>1.146</td>
<td>0.296</td>
</tr>
</tbody>
</table>

the period between the birth of the placenta and the return of genetic organs as before pregnancy (Nugroho, 2014).

The results of the study in the group that was not given the intervention experienced a slightly longer wound healing compared to the group that was given a decoction of red betel leaf, this proves if the treatment of the feminine area can not only be done by using vulvar hygiene.

**Bivariate Discussion**

The results of the statistical test obtained a P-value = 0.001 (<0.05) which means that there is an effect of washing red betel leaf boiled water in accelerating the healing of postpartum mothers' perineal wounds at BPM Wirahayu, S.Tr.Keb in 2021.

In line with the theory put forward by Rukiyah (2011), the postpartum period is a critical period for both mother and baby, so that a postpartum mother requires special care to restore her body's health condition, including attention to perineal wound healing with care and increasing nutritional intake. Especially protein, this is important because it can be an entry point for germs and cause infection.

So it is necessary to do vulvar hygiene during postpartum, to accelerate the healing of perineal wounds, one of which is by using boiled water of red betel leaf. Red betel leaf contains phytochemical compounds namely alkaloids, saponins, tannins and flavonoids so that this plant can be used to cure various diseases. The red betel plant has a size of 10cm and 5cm. when held, the leaves feel thick and stiff and the aroma of the leaves is sharp and tastes bitter (Hidayat, 2019).

In line with research conducted by Damarini (2013) The Effectiveness of Red Betel in the Treatment of Perineal Wounds in Independent Practice Midwives. 5–6 days, p-value is obtained 0.00 <0.05, which means that red betel leaf is more effective than iodine in the treatment of perineal wounds during the postpartum period.

The average length of time for postpartum mother's perineal wound healing to be washed with boiled water of red betel leaf at BPM Wirahayu, S.Tr.Keb in 2021 with a mean of 5.13 days, and postpartum mothers' perineal wounds who were not given red betel leaf boiled water with a mean of 7.20 days. which means that wound healing in the intervention group was better than the group that was not given the intervention. Wound healing is done to minimize the occurrence of perineal infection.

Perineal infection can be avoided and even healing can be accelerated if treatment is carried out quickly and appropriately, improper care can be detrimental to the patient. Perineal pain is a significant source of problems for many women after childbirth, not only in the immediate postpartum period but also in the long term. Post-episiotomy wounds must be treated properly so that the wound heals quickly and infection does not occur. The cause of perineal infection is Streptococcus haemolyticus, Staphylococcus aureus and Eschericia coli.

For that we need the right technique in wound care, and the most important thing is the use of the right materials in wound care. This is very important because if it is not done properly it can cause the wound to be difficult to heal and allow infection to occur. The nurse must understand the physiology of wound healing and be challenged to provide a wound assessment based on knowledge of skin integrity and infection prevention. Materials commonly used for infection prevention are antiseptic solutions.

The content of Karvakrol is an antifungal disinfectant so it can be used as an antiseptic to get rid of bad breath and vaginal discharge. Eugenol can reduce pain, besides that most essential oils have strong antibacterial and antifungal properties (Syahidah, 2012; Darmani, 2013). Other researchers on the isolation of endophytic fungi from betel leaf (Piper betle L.) stated that they were antimicrobial against Escherichia coli, Staphylococcus aureus and Candida albicans. Betel leaf essential oil (P. betle L.) is one of the essential oils with antibacterial properties.

This oil can inhibit the growth of several types of harmful bacteria such as Escherichia coli, Salmonella sp, Staphylococcus aureus, Klebsiella and Pasteurella. Betel also contains arecoline in all parts of the plant. This substance is useful for stimulating the central nervous and thinking power, increasing peristalsis. Thus, blood circulation in the wound becomes smooth, oxygen becomes more, this can affect wound healing faster (Darmani, 2013).

**CONCLUSIONS**

Research with the title "the effect of water
washing" red betel leaf decoction in accelerating the healing of postpartum mothers' perineal wounds at BPM Wirahayu, S.Tr.Keb in 2021" the following conclusions can be drawn:

The average duration of healing of postpartum mothers' perineal wounds who were given red betel leaf boiled water with a mean of 5,137 days Min 3 Max 7.

The average duration of postpartum perineal wound healing that was not given a red betel leaf decoction with a Mean 7,20 days Min 6 Max 9.

The results of statistical tests obtained P-value = (0.05) which means that there is an effect of washing red betel leaf boiled water in accelerating the healing of postpartum mothers' perineal wounds at BPM Wirahayu, S.Tr.Keb Tahun 2021.

SUGGESTION

For Educational Science

It is hoped that it can be used as a reference to the Malahayati University library as reading material for students of the Faculty of Medicine who want to conduct research related to washing red betel leaf boiled water to accelerate perineal wounds in postpartum mothers.

Share PMB Wirahayu

It is hoped that the results of this study can be used as input for clients and PMB and clinics that are around in order to accelerate the perineal wound by using boiled red betel leaf water.

Further Research

It is hoped that the results of this study can be used as a reference to conduct research results related to perineal wound healing by using betel leaf decoction intervention by comparing 2 types of betel leaves red and green, the next researchers hope in further research can add the timing of the intervention, in order to get better results.

REFERENCE


Christiana, Ari, Mizam Ari Kurniayanti. 2014. The Effectiveness of Betel Leaf Decoction in Accelerating the Healing of Perineal Wounds. Husada Media Health Scientific Journal, 02(02), 1-6.


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