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The Influence of Boiled Water Green Sirih Leaves Against Perineum Wound in Public Mother at BPM Bidan Desy Astuti Tangerang in 2022

Siti Nurzannah
e-mail : sitinurzannah75@gmail.com
Assyifa Midwifery Academy Tangerang, Indonesia

Abstract

Improper perineal care can lead to postpartum infection. Perineal injury is a wound that resulted from an episiotomy. Traditionally, perineal wound management uses boiled green betel leaf water to accelerate the healing of perineal wounds. This study aims to determine the effect of boiling green betel leaf water on perineal wounds in postpartum mothers at BPM bidan Desy Astuti in tangerang Regency in 2022. This study used a quasi-experimental research design with a two group pretest posttest design. The research sample consisted of 30 respondents. The sampling technique used total sampling. The instrument used was the observation sheet. The bivariate analysis test used the wilcoxon sign rank test. Based on the results of the wilcoxon sign rank test, the pretest group score was 0.001 and the posttest group score was 0.005. Both groups have a p value <0.05, which means that there is a difference in REEDA scores between the intervention group and the control group. Based on the results of the man Whitney test, the value of sig = 0.000 in the variable of perineal wound healing with boiled greed betel leaf water, it can be concluded that “Ha is accepted” (Sig. 0.000 <0.05) This means that there is an effect of giving boiled green betel leaf water on perineal wounds in postpartum mother in BPM midwife Desy astute in Tangerang Regency in 2022. There is a significant effect on the provision of green betel leaf water decoction on pperineal wound healing in post partum mothers.

Keyword: Betel Leaf Water Decoction, Perineal Wounds, Public Mother, Wound Healing

Introduction

Perineal wounds are wounds caused by episiotomy. Episiotomy is an incision in the perineum to facilitate delivery and prevent perineal rubtur, making the edges of the wound flat so that it is easy to hectate, preventing disease or resistance to the head and infection, but it is not supported by sufficient scientific evidence. Episiotomy is not permitted because there are certain indications for continuing to carry out an episiotomy.

Injuries to the birth canal can certainly occur during every birth, which will become a pathway for commensal bacteria to enter and become infectious. This will increase the risk of postpartum infection due to perineal injury due to episiotomy, spontaneous rupture and fetal trauma. Even though this wound is local, it requires proper care to avoid systemic spread of infection. Improper care of perineal wounds can cause infection. The condition of the perineum which is

exposed to lochia and is moist will really support the growth of bacteria which can cause infections in the perineum.

The incidence of infection in mothers is 20%. Perineal wound infections accounted for 11%. Various efforts have been made to overcome infections, but these efforts are still less than optimal. Infections in the postpartum period may originate from infected perineal suture wounds. This stitching wound is caused by an episiotomy or incision wound that becomes infected due to a tear in the birth canal or a tear in the perineum. Stitched wounds caused by episiotomy or perineum tears take 6 to 7 days to heal.

In his research, it was stated that nutritional knowledge and personal hygiene influence the healing of perineal wounds. Meanwhile, the wound healing phase depends on several factors, including knowledge, personal hygiene, early mobilization, nutrition, economic status, and the correct way to care for the perineum.

Improper perineal care can cause postpartum infections. This is supported by the fact that the perineal wound area affected by lochea is a moist area, so it will really support the growth of bacteria. Infections resulting from poor care can cause complications such as; bladder infections or birth canal infections.

In 2018 approximately 830 women died from preventable causes related to pregnancy and childbirth. 99% of maternal deaths occur in developing countries. Between 1990 and 2015, the worldwide maternal mortality rate fell by around 44%, between 2016 and 2030 as part of the sustainable development goals, the target is to reduce the global maternal mortality ratio to less than 70 per 100,000 live birth. Maternal mortality in Indonesia is still dominated by 3 main causes of death, namely infection, hypertension in pregnancy (HDK), and bleeding.

According to the Chair of the

Scientific Committee of the International Conference on Indonesia Family Planning and Reproductive Health (ICIFPRH), until 2019 Indonesia's MMR was still high, namely 305 per 100,000 live births. In fact, Indonesia's MMR target in 2015 is 102 per 100,000 live births. The Ministry of Health of the Republic of Indonesia (2017) revealed the factors that directly cause death of pregnant women and childbirth, namely due to infection (7.3%), hypertension (27.1%), bleeding (30.3%), and others (40.8 %). Meanwhile, indirect factors causing maternal death are due to late treatment, access, socio-cultural, educational and economic factors. In 2015, the incidence of AKI in Indonesia decreased to 305/100,000 live births compared to 2012 with an incidence of 359/100,000 live births.

Healing of perineal wounds is everything that happens to restore the density and integrity of the perineal tissue, which was previously torn or deliberately cut to widen the birth canal. Perineal wound care aims to prevent infection, increase comfort and speed healing. One effort to prevent infection from occurring due to perineal wounds is that many Indonesians still use traditional methods to treat perineal wounds, one of which is using boiled betel leaf water to clean the genitals so that the perineal wound heals quickly and the smell of blood doesn't come out. fishy. Betel leaves are classified as plants that have many therapeutic effects.

Betel is a plant in Indonesia whose body propagates on the trunks of other trees such as rambutan, jackfruit or other large plants. This vine can reach a height of 5-15 m. The betel plant is greenish brown, round, segmented and is where the roots come out. The green leaves are heart-shaped, have pointed tips, grow alternately, have stems and emit a distinctive odor when squeezed.

Boiled water from betel leaves can be used to help treat wounds because boiled betel leaves contain chemicals and antibiotics which have enormous benefits. Among the contents of betel leaves are essential oil, hydroxycavicol, kavicol, kavibetol, allypyrocatekol, cyneole, caryophyllene, candinene, estragol, terpenne, sesquiterpene, phenyl propane, tannin, diastase, sugar and starch.

Among these ingredients, siri has an antibiotic effect, based on this therapeutic effect, siri can also be used as an ingredient for wound care which is usually used by washing and soaking, things like this have become a tradition for mothers to do after giving birth.

The length of the postpartum period is calculated from the time the delivery is completed until the uterus returns to its pre-pregnancy state and the length of the postpartum period is approximately 6 weeks. During this period, maternal death can still occur due to bleeding or infection.

According to research, mothers' lack of knowledge about proper perineal care (vulva hygiene) is one of the causes of infections in the perineum. This is also in line with previous research which states that there is a relationship between postpartum mothers' knowledge about perineal wound care and perineal wound cleanliness. Based on a preliminary study conducted by the author at BPM Midwife Desy Astuti Putri in the January 2021 period, there were 51% of postpartum mothers who experienced perineal wounds, and 39% of postpartum mothers who did not experience perineal wounds.

This study aims to determine the effect of boiling green betel leaf water on perineal wounds in postpartum mothers at BPM bidan Desy Astuti in tangerang Regency in 2022.

Method

This type of research is quantitative. This research uses quasi experiments (experiments). The design used was a quasi experimental pretest and posttest using a two group pretest – posttest design. In the experimental group, the scale of the wound was measured before and after the intervention. The experimental group was given intervention by giving boiled green betel leaf water, while the control group was not given boiled green betel leaf water but received intervention according to the procedure. Measurements before being given boiled green betel leaf water in the experimental group were marked with O1 and after being given boiled green betel leaf water were marked with O2, while in the group before the intervention period it was marked with O3 and after the intervention was marked with O4.

The population in this study was 30 postpartum mothers at BPM Midwife D Tangerang Regency who received perineal wound treatment in August-October 2022. The sampling technique in this research is total sampling. The samples taken in this study were 30 postpartum mothers. The type of instrument used in this research is a questionnaire and injury scale. Questionnaire to determine the characteristics of the respondent, this questionnaire includes questions about age, education, employment and parity (history of previous births)

Result and Discussion

1. Age Distribution of Respondents

Table 1 Characteristics of Respondents Based on Respondent Age

Respondent's Age	Frequency (f)	Percentage (%)
<20 year	1	3,3
20-35 year	28	93,4
>35 year	1	3,3
Total	30	100

The table above depicts the age distribution of respondents. From the data above, it can be concluded that almost all respondents are postpartum mothers with an age range of 20-35 years, namely 28 (93.4%) respondents. In the age range <20 years and >35 years there were the same number of respondents, namely 1 (3.3%) respondent.

2. Characteristics of Respondents Based on Parity

Table 2 Characteristics of Respondents Based on Parity

Respondent's Age	Frequency (f)	Percentage (%)
Primipara	12	40,0
Multiparous	18	60,0
Total	30	100

The table above depicts the parity distribution of respondents, almost some of the respondents are multiparous, namely 18 (60%) respondents, while respondents with intervention.

Table 3 REEDA Pretest and Posttest scores in the intervention group

REEDA Score Intervention	Pretest	Posttest
>5 (not good)	14 (93,3%)	0 (0%)
≤ 5 (good)	1 (6,7%)	15 (100%)
Total	15 (100%)	15 (100%)
Lowest value	5	2
The highest score	9	4
Average	6,67	3,00
(Standard deviation)	(±0,975)	(±0,654)

The table above presents the results of the REEDA score analysis in the intervention group before and after being given therapy using green betel leaf decoction. From this table it can be concluded that before being given therapy using green betel leaf decoction, almost all respondents experienced perineal wounds in the bad category or had a

REEDA score >5, namely 14 (93%) respondents. 1 (6.7%) respondent was in the good perineal wound category. The average REEDA score in the intervention group before therapy using green betel leaf decoction was 6.67, which means it was in the category of bad perineal wounds with the highest score being 9 and the lowest score being 5.

The results of the analysis on posttest measurements or after being given therapy using green betel leaf decoction showed that all respondents had injuries to the perineum in the good category or a REEDA score ≤ 5, namely 15 (100%) respondents, and 0(0%) respondents who had injuries. in the perineum in the unfavorable category or REEDA score >5. The mean REEDA score in the intervention group after being given therapy using green betel leaf decoction was 3.00, which means it was included in the good perineal wound category with the highest score being 4 and the lowest score being 2.

Differences in Pretest and Posttest REEDA Scores in the Control Group The control group or the group that was not given betel leaf decoction had a mean pretest measurement value of 6.93 and a posttest mean of 6.20 with a p value of 0.005. Based on the results of statistical tests, there was a difference in the REEDA score for perineal wounds of postpartum mothers in the control group. Even though based on statistical tests there is a difference between the pretest and posttest results, based on the results of the average REEDA score in the pretest and posttest, the control group is categorized as a bad perineal wound.

Perineal wounds are tears that occur when a baby is born either spontaneously or by using tools or procedures. Perineal tears generally occur in the midline and can become extensive if the fetal head is born too early.

Caring for perineal wounds in

mothers after giving birth is useful for reducing discomfort, maintaining cleanliness, preventing infection and speeding up healing. Perineum care generally coincides with vulva care. Things that need to be considered are preventing contamination with the rectum, gently handling wound tissue, cleaning blood which is a source of infection and odor..

The results of this study are in accordance with previous research on the effect of boiled betel leaves on perineal wounds in postpartum mothers. The 30 respondents involved in this research were divided into two groups, namely 15 respondents included in the control group and the other 15 respondents included in the intervention group. In the control group, respondents were not given betel leaf decoction therapy, they only cleaned the genital area as usual, such as with running water and soap. The results of the study in the control group showed that wound healing was 2 days slower than the intervention group who were given betel leaf decoction therapy, which was around 7-10 days.

According to the researchers' assumption, the decrease in REEDA scores in the control group occurred because when a wound occurs, naturally damaged tissue in the body will experience cell regeneration, therefore the wound will experience several stages of healing even without treatment. Factors that influence perineal wound healing in the control group are personal hygiene factors, namely how often the mother changes sanitary napkins and how she cares for perineal wounds, but wound healing is influenced by several other factors such as age, degree of wound, cleanliness of the wound, nutritional status, and disease. .

Differences in REEDA Pretest and Posttest Scores in the Intervention Group. Based on table 4.6, it can be seen that the

mean value of the pretest measurement in the intervention group is 6.67 and in the posttest group is 3.00. Based on the results of the statistical test above, the p value in the intervention group was 0.001 ($p < 0.05$), so there was a difference in the REEDA score in the perineal wounds of postpartum mothers before and after being given green betel leaf decoction therapy.

According to the theory presented by Rukiah (2010), the aim of perineal care is to prevent infections in connection with tissue healing, to prevent infections in the vulva, perineum and inside the uterus, to heal perineal wounds (perineal sutures), to clean the perineum and vulva. Another theory states that treatment for perineal wounds can be done by pharmacological or non-pharmacological methods.

Pharmacologically, namely by giving antiseptic drugs. Antiseptic or antibiotic treatment for the treatment of perineal wounds currently tends to be avoided. Some antibiotics should be avoided during lactation, as they are very significant and risky. This is the reason why midwives advise postpartum mothers to use betel leaves as a medicine that speeds up the healing of perineal wounds.

This research is in line with previous research on the effectiveness of healing perineal wounds in postpartum mothers using betel leaves. The sample in this study was 30 mothers who experienced perineal tears as the treatment group and 30 as the control group using betadine.

The results of the study were obtained from 30 respondents who used betel leaves after 7 days post partum, there were 22 respondents (73.3%) whose perineal wounds were dry and 8 respondents (26.7%) who were still wet, while the 30 respondents who did not use betel leaves, after 7 days post partum, 18 respondents (60%) had wet perineal wounds and 12 respondents (40%) had

dry perineal wounds.

According to the researchers, the decrease in the REEDA score from the poor category to the good perineal wound category in the intervention group occurred because one of the factors that influenced wound healing was personal hygiene. Green betel leaves contain essential oils that contain, among other things, chavicol and chavibetol, which are compounds that have antiseptic properties, so that by carrying out vulva hygiene or cleaning the genital area using betel leaves you can reduce the risk of infection caused by microorganisms in wounds.

The Effect of Giving Boiled Green Betel Leaf Water on Perineal Wounds in Postpartum Women. Based on the table of hypothesis test results using Mann-Whitney from the intervention group and the control group. The p value of 0.000 (<0.05) shows that there is a difference in the REEDA score measurement results from the intervention group and the control group. A larger mean value indicates a higher REEDA score, this indicates a poor condition of the perineal wound. In the intervention group or the group that received green betel leaf decoction, the mean was 8, while in the control group it was 23, the intervention group had a smaller mean than the control group, which means that there was an effect of giving betel leaf decoction on perineal wounds in postpartum women after the intervention for 7 days. .

The results of this study are in accordance with the results of research which states that healing of perineal wounds can be done using the traditional method, namely by boiling warm water with betel leaves by washing them in the morning, afternoon and evening. In addition to speeding up wound healing, it can also eliminate the smell of blood that comes out, which is not fishy. The theory is that betel leaves have an antibiotic

effect. Arecoline is useful for stimulating the central nervous system to increase peristaltic movements so that blood circulation in the wound becomes smoother, there is more oxygen, thus influencing healing. wounds faster. Based on these effects, betel can be used as a wound treatment.

In accordance with previous research on the comparison between healing perineal wounds that used boiled betel leaf water and those that did not use boiled betel leaf water. The subjects of this research were 15 postpartum mothers who used boiled betel leaf water and 15 people who did not use boiled betel leaf water. There were 15 respondents who carried out perineal treatment using boiled betel leaf water with 11 people categorized as fast healing time, 4 people as normal, and 0 people as slow with a mean of 3.27. There were 15 respondents who did not use boiled betel leaf water, with a fast healing time of 0, normal 7 people and slow 8 people with a mean of 7.53. The p value was 0.000, which means that there is a difference between the healing of perineal wounds that use boiled betel leaf water and those that do not use boiled betel leaf water.

This is different from the results of research conducted by Rostika regarding the effect of giving betel leaf decoction on the healing time of perineal wounds. The research results showed that the average healing time for perineal wounds after using boiled betel leaf water was in the range of 7-10 days, which means that the research results showed that the healing time for perineal wounds was more than 7 days.

Perineum treatment using boiled water from green betel leaves has faster healing properties. because betel leaves contain 1-4.2 essential oil (as the fragrant aroma of betel leaves), the essential oil itself contains betlephenol, sesquiterpenes, starch, 0.8-1.8% diastase,

sugar, and zamak (chemical compounds). which is used to kill or inhibit the growth of microorganisms in living tissue such as the surface of the skin) and anti-inflammatory (a chemical compound used to eliminate inflammation. As well as kavikol 7.2-16.7% which functions as an antiseptic (a substance that can inhibit the growth of germs) The statistical test results of this research can be concluded that there is an influence of giving boiled green betel leaf water on perineal wounds in postpartum mothers.

Conclusion

The REEDA score in the control group had an average pretest score of 6.93, which means it was in the category of bad perineal wounds. The mean posttest score in the control group was 6.20, which means it was included in the bad perineal wound category.

The REEDA score in the intervention group that was given green betel leaf decoction therapy obtained an average pretest score of 6.67, which means it was in the category of bad perineal wounds. The average posttest score in the intervention group was 3.00, which means it was included in the good perineal wound category. Based on the research results, it was found that there was a significant effect on giving boiled green betel leaf water on perineal wounds in postpartum mothers.

References

1. Ambarwati, E., (2017), *Asuhan Kebidanan Nifas*, Yogyakarta, Mitra Cendikia. Anggeriani, (2018).
2. A'yunin, Q., (2016), *Gambaran Pengetahuan Ibu PostPartum Tentang Infeksi Pada Rupture Perineum Di RB*, Mattiro Baji Sunguminasa Gowa. Karya Tulis Ilmiah Universitas Islam Negeri Alauddin.
3. Celly., (2018), *Pengaruh Penggunaan Daun Sirih Terhadap Penyembuhan Luka Perineum Ibu Nifas di Desa Sumber Mulyo Kec Jogoroto Kab Jombang*.
4. Christina, A., dan Kurniyanti, M. A., (2014), *Efektifitas Air Rebusan Daun Sirih Dalam Mempercepat Penyembuhan Luka Perineum*, *Jurnal Ilmiah Kesehatan Media Husada*, 2(2), hal. 1–6. doi: 10.33475/jikmhv2i2.115.
5. Damarini, dkk., (2013), *Efektifitas Sirih Dalam Perawatan Luka Perineum Di Bidan Praktik Mandir*, Kesmas, *Jurnal Kesehatan Masyarakat Nasional* Vol 8, No. 1 Agustus 2013.
6. Damayanti, I. P., (2015), *Panduan Lengkap Ketrampilan Dasar Kebidanan II*, Yogyakarta, Deepbulish diakses dari <http://books.google.com/books> pada tanggal 3 januari 2019.
7. Depkes R.I., (2014), *ProfilKesehatan Indonesia*, Available, online, on <http://www.depkes.go.id/.../profil-kesehatan-indonesia/profil-kesehatan-indonesia-2014>, diakses 10 Agustus 2022.
8. Eldawati, S., (2015), *Hubungan Pengetahuan Dan Sikap Ibu Nifas Dengan Praktik Perawatan Masa Nifas, Di Kecamatan Gunungpati Kota Semarang*, *Jurnal Kesehatan Masyarakat (e-Journal)*, Volume 3, Nomor 3,, 228-237.
9. Handayani, R., (2016), *Gambaran Tingkat Pengetahuan Ibu Nifas Tentang Perawatan Luka Perineum Yang Benar Di RSUD Surakarta*, *Sekolah Tinggi Ilmu Kesehatan Kusuma Husada*. Jakarta, EGC.
10. Juraida, dkk., (2013), *Asuhan Kebidanan Ibu Nifas dan Deteksi Dini Komplikasi*.
11. Kemenkes RI (2015), *Kebijakan Pemerintah Gerakan Sayang Ibu*,

- Jakarta,
12. KEMENKES, RI (2017), *Pedoman Kesehatan Maternal dan Neonatal*, Jakarta. Kurnianingrum, Ari dan Anik Kurniawati, (2015), *keefektifan Penyembuhan Luka Perineum Pada Ibu Nifas Menggunakan Daun Sirih*, Klaten, Jurnal Terpadu Ilmu Kesehatan Poltekkes Surakarta, Volume 4 No. 2 November 2015.
 13. Kusumastuti, dkk., (2014), *Buku Ajar Asuhan Kebidanan Nifas*, Yogyakarta, Leutikaprio.
 14. Nagori, dkk., (2011), *Piper betle l, A review on its ethnobotany, phytochemistry, pharmacological profile and profiling by new hyphenated technique DART-MS (Direct Analysis in Real Time Mass Spectrometry)*, Journal of pharmacy.
 15. Smaltzer, S. (2015). *Buku Ajar Keperawatan Medikal Bedah*. Jakarta: EGC. Sulistyawati, A., (2016), *Buku Ajar Asuhan Kebidanan Pada Ibu Nifas*, Yogyakarta.
 16. Terhadap Kecepatan Penyembuhan Luka Perineum Pada Ibu PostPartum. *Akademi Kebidanan Abdurahman Palembang*, 80-87.
 17. Yuliaswati, E., (2018), *Upaya Mempercepat Penyembuhan Luka Perineum Melalui Penggunaan Air Rebusan Daun Sirih Hijau*, Surakarta, Jurnal Kesehatan STIKes Aisyiyah.