



**THE EFFECT OF ADMINISTRATION OF BINAHONG LEAF BOILED WATER ON ACCELERATING THE HEALING OF PERINEAL WOUNDS FOR PUBTER MOTHERS**

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**ABSTRACT**

A perineal wound or tear is an injury to the perineal area caused by an epistomy or natural laceration. One preventive measure to reduce the incidence of infection in postpartum mothers is to treat perineal wounds. The antiseptic content of the binahong plant can kill germs, increase resistance to infection, and speed up wound healing. This study aims to determine the effect of giving boiled water from binahong leaves on accelerating the healing of perineal wounds in postpartum mothers. This type of research is quantitative with a quasi-experimental design with Posttest Only Control Group Design. The population of this study was all postpartum mothers, totaling 30 respondents. The sample in this study consisted of 5 respondents who were given boiled water from binahong leaves (intervention) and 5 respondents who were not given boiled water from binahong leaves (control). Bivariate analysis was carried out using statistical tests to test mean dependent differences, namely the independent t-test, with a confidence level ( $\alpha$ ) = 0.05. The results of the study showed that there was a significant effect of giving boiled water from binahong leaves on accelerating perineal wound healing in postpartum mothers, with a p-value of 0.007. Where the significance value is smaller than the  $\alpha$  value of 0.05. The conclusion of this study is that  $H_0$  is rejected, meaning that there is a significant difference in the acceleration of healing of perineal wounds between the intervention group and the control group.

Keywords: binahong leaves; perineal wounds; pubter mothers

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**INTRODUCTION**

The postpartum period is a period of recovery, starting from the delivery being completed until the uterine organs return to their pre-pregnancy state. Nifas (puerperium) comes from Latin. Puerperium comes from two syllables, namely puer and parous. Puer means baby and parous means giving birth. So it can be concluded that the postpartum period is the period after giving birth (Mayangsari, 2020). A perineal wound or tear is an injury to the perineal area caused by an epistomy. It can also occur naturally because during the birth process, there is a lack of protection for the perineum, so that the baby's head and the mother's pressing pressure can tear the perineum and surrounding tissue (Wiknjosastro, 2018) Based on data from the World Health Organization (WHO), almost 90% of normal births experience perineal tears either spontaneously or with an episiotomy. Throughout the world, perineal tears occur in almost 2.7 million cases in women giving birth. This figure will continue to increase to 6.3 million in 2024, if it does not receive good attention and handling. In Asian

countries, the incidence of perineal lacerations is a fairly high problem in society (Ghassani et al, 2020).

Based on data from the Indonesian Demographic Health Survey (SDKI), it shows that in Indonesia perineal tears or ruptures are experienced by 75% of mothers giving birth. The prevalence of mothers experiencing perineal tears in Indonesia in the 25-30 year age group is 24%, and in mothers 32-39 years it is 62%. In 2017, it was found that of a total of 1951 spontaneous vaginal births, 57% of mothers received perineal sutures, 28% due to episiotomy and 29% due to spontaneous tears (MOH RI, 2019). Therapy in the world of health to prevent infection in perineal lacerations is pharmacological therapy and non-pharmacological therapy. Pharmacological therapy is given through antiseptics and antibiotics but has side effects such as irritation, toxic reactions, skin burns, changes in skin color due to the dye contained in iodine and inhibits the formation of collagen which functions to accelerate wound healing (Rahmawati, 2014).

One herbal plant that has the potential to prevent infection in perineal lacerations is binahong leaves (*Anredera cordifolia*). In several countries, binahong leaves are known as meidera vine, potato vine, fat leaf, folha gorda or lamb's tail vine, which is considered a creeping plant that grows in coastal areas or rainforests (Selawa W, 2013). Postpartum mothers give boiled water from binahong leaves which is very good for healing perineal wounds. The antiseptic content in the binahong plant can kill germs, increase resistance to infection, and speed up wound healing (Surjantini, 2018). Health development programs in Indonesia still prioritize efforts to improve the level of maternal and child health (KIA), especially in the most vulnerable groups, namely the health of pregnant women, postpartum women, postpartum mothers and newborn babies (Ministry of Health of the Republic of Indonesia, 2019). One preventive measure to reduce the incidence of infection in postpartum mothers is to treat perineal wounds. Perineum care is generally the same as vulva care. Things that need to be considered are preventing contamination with the rectum, gently handling tissue wounds, cleaning blood which is a source of infection and odor (Saifuddin, 2020).

The technical programs and policies that have been established by the government are related to the postpartum period, namely that midwives or health workers carry out postpartum visits at least four times. These four visits are within the first six to eight hours after delivery, six days after delivery, two weeks after delivery, and six weeks after delivery. The purpose of this visit is to assess the status of the mother and newborn, to prevent, detect and treat problems that occur (Saifuddin, 2020). Assessment of perineal wound healing can be seen from the REEDA sign (redness, edema, ecchymosis, discharge, and approximation) in the first 24 hours postpartum. This assessment tool is used to assess the condition of the perineal sutures, with a certain score indicating how well the perineal wound is healing. The highest score for each aspect of these 5 aspects (REEDA) is 3, while the lowest score is 0. There are three interpretations of score categories, namely 0 for good wound healing (good wound healing), for 1-5 poor wound healing (no wound healing). sufficient), while >5 = poor wound healing (poor wound healing). A preliminary study conducted at the Hermilawati Independent Midwife Practice (PMB) in Suka Mulya Village in January - March 2023 obtained data on 39 women giving birth normally, 20 of whom had perineal wounds (Hermilawati, 2023). Based on the case description in the background above, I am interested in conducting research with the title "The effect of giving boiled water from binahong leaves on healing perineal wounds in postpartum mothers".

**METHOD**

This research uses a type of quasi-experimental research, which is a way to look for a causal relationship between two factors that are deliberately caused by the researcher by eliminating or reducing other disturbing factors. Part two of this study was divided into groups, namely the control group was not given perineal wound care treatment using boiled water from binahong leaves and the intervention group was given perineal wound care treatment using boiled water from binahong leaves. The research design used was a Posttest Only Control Group Design, meaning there were 2 groups, namely the experimental group (intervention) and the control group. This planning allows researchers to measure the effect of treatment (intervention) on the experimental group by comparing the group with the control group (Hidayat, 2018). The population is the entire object of this research, namely all postpartum mothers who experience perineal wounds. The population in this study were postpartum mothers who gave birth normally/vaginally at PMB Hermilawati in Suka Mulya Village in April – June 2023 with perineal wounds as many as 30 respondents.

The sample used in this study was 10 postpartum mothers who gave birth normally/vaginally with perineal wounds, who were divided into 2 groups, namely the intervention group and the control group. Where the intervention group was the group that was given perineal wound treatment using boiled water from binahong leaves, totaling 5 respondents, and the control group was the group that was not given perineal wound treatment using boiled water from binahong leaves, totaling 5 respondents. The sampling technique used in the research is purposive sampling, namely sampling based on certain considerations that have been determined by the researcher. The instruments used in this research were an observation sheet to support the research data, informed consent to find out if the respondent was willing to become a research respondent, an assessment sheet for perineal wound healing, a measuring tool to assess the extent of the healing process (REEDA) and documentation. Data analysis for Univariate Analysis was carried out to explain the characteristics of the research, in this case the dependent variable, namely the psychological condition of the mother in the postpartum period before and after consuming boiled eggs in the form of frequency and percentage distribution. Meanwhile, Bivariate Analysis was carried out using statistical tests to test the dependent mean difference, namely using the independent t-test, with a confidence level ( $\alpha$ ) = 0.05.

**RESULTS**

Table 1.  
Characteristics Respondents to Postpartum Mothers

Characteristics	Criteria	Intervention		Control	
		f	%	f	%
Age	a. < 20 years	0	0	1	10
	b. 20 -35 years	4	40	4	40
	c. > 35 years	1	10	0	0
Education	a. elementary school	0	0	1	10
	b. JUNIOR HIGH SCHOOL	0	0	1	10
	c. SENIOR HIGH SCHOOL	4	40	3	30
	d. PT	1	10	0	0
Parity	a. Primigravida	1	10	1	10
	b. Multigravida	4	40	4	40
Total		5	50%	5	50%

Tabel 1 Based on the research that has been carried out, in the table presented, the data on the characteristics of respondents shows that from 10 respondents, the majority of postpartum

mothers aged 20-35 years were 8 respondents (80%) while the comprehensive group was 4 respondents (40%) in the control group and the intervention group. 4 respondents (40%). The majority educational characteristic is high school, 7 respondents (70%). And the characteristics of respondents based on parity are 2 primigravida mothers (20%), namely 1 respondent mother in the control group and 1 respondent in the intervention group, and 8 comprehensive multigravida mothers (80%) in 2 groups, namely 4 respondents (40%) in the control and 4 (40%) respondents in the intervention group.

Table 2.  
Frequency of Respondents Based on Length of Wound Healing in Postpartum

		Healing			Cumulative Percent
		f	Fast	Normal	
Legitimate	Intervention	5	5	0	50.0
	Control	5	0	5	50.0
	Total	10	5	5	100.0

Tabel 2 Frequency of respondents in the control group and intervention group based on the length of wound healing. In postpartum mothers who were not given boiled water from binahong leaves, 5 respondents (50%) postpartum mothers who experienced normal healing and all postpartum mothers who were given boiled water from binahong leaves. Postpartum patients who experienced fast wound healing were 5 respondents (50%), this research showed that binahong leaf extract was able to accelerate the reduction in the size of perineal wounds. This shows the healing process of perineal wounds in postpartum mothers, this ability cannot be separated from the active compounds contained in binahong leaves.

Table 3.  
Average Healing of Perineal Wounds in Postpartum Women

Wound healing	Group Intervention		Control Group	
	N	%	N	%
Means	0.8500		1.6500	
Std. Deviation	.05590		.39922	
Minimum	0.75		.138	
Maximum	.88		.225	
Good	5	50	0	0
Not good	0	0	5	50
Bad	0	0	0	0

Table 3 , the average perineal wound healing rate in the intervention group was that all 5 respondents (50%) experienced good wound healing. Meanwhile, the average perineal wound healing in the control group was that all 5 respondents (50%) experienced poor wound healing.

Table 4.  
Normality Test

Data Normality Test	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	df	signature	Statistics	df	signature
Group Intervention	.473	5	.001	.552	5	.000
Control Group	.355	5	.039	.774	5	.048

Tabel 4, namely the output test results of the normality test in the Shapiro-Wilk test section, it is known that perineal wound healing in the intervention group obtained a sig value of 0.000, while perineal wound healing in the control group obtained a sig value of 0.048. Because the p-value is

<0.05, it can be concluded that the data is not normally distributed, so the Mann Whitney Test will be carried out.

Table 5.  
Effect of Giving Boiled Water from Binahong Leaves on the Acceleration of Healing of Perineal Wounds in Postpartum Women

Group	f	Rankings Mean	Number of Ratings	Z	Asymp.Sig, (2-tailed)
Intervention	5	3.00	15.00	-2,677	,007
Control	5	8.00	40.00		

Table , the results obtained from the Mann Whitney Test to compare perineal wound healing in the intervention group and the control group were obtained in the intervention group at 3.00 with a Sum of Ranks value of 15.00. Meanwhile, in the control group the Mean Rank was 8.00 with a Sum of Ranks value of 40.00 with a Z value of -2.677 and a p-value (0.007) <  $\alpha$  (0.05), so H0 was rejected and Ha was accepted, which means that the perineal wound healing process in the intervention group faster than the control group.

## DISCUSSION

### Characteristics of Respondents Based on Age

The characteristics of the respondents were known from 10 respondents, the majority of postpartum mothers aged 20-35 years were 8 respondents (80%) who were distributed in the control group with 4 respondents and the intervention group with 4 respondents. From the table data above, it can be concluded that the characteristics of respondents based on age are that the majority of respondents are aged 20-35 years (80%). Based on the characteristics of perineal wound healing seen from the age of 20-35 years, the majority of mothers experienced fast healing of perineal wounds, namely 4 respondents, and those whose perineal wounds healed normally were 4 respondents. So, based on the results of the researchers' analysis regarding perineal care and good perineal wound healing, there are people aged 20-35 years.

According to Wiknjosastro (2018), age is very influential, where wound healing occurs more quickly in young people than in older people. Older people cannot recognize stress such as tissue trauma or infection. Age 20-35 years is a safe age for pregnancy and childbirth, because at that age the function of the reproductive organs is still good. Based on research by Fatimah (2019), it states that wound healing at a young age tends to be faster than in older people. In elderly people, the body is more often affected by chronic diseases, decreased liver function can interfere with the synthesis of blood clotting factors, which results in impaired and prolonged wound healing. In addition, wound healing occurs more quickly in young people than in older people. Older people cannot define stress as tissue trauma or infection (Winkjosastro, 2018). Thus, the number of characteristics of respondents, mostly aged 20-35 years, is a characteristic of respondents who are good at healing perineal wounds.

### Characteristics of Respondents Based on Education

Based on the characteristics of perineal wound healing seen from the results of research conducted on postpartum mothers who experienced perineal wounds at PMB Hermilawati in Sukamulya Village, Lempuing District, out of 10 respondents, 5 respondents (50%) showed that perineal wound healing was normal. Perineal wound healing was good for 5 respondents (50%). The education of postpartum mothers with perineal wounds at PMB Hermilawati in Sukamulya Village, Lempuing District, most of whom had a high school education, 7 respondents (60%). Judging from the healing of perineal wounds at the high school education level, the majority of mothers experienced fast healing of perineal wounds, namely 4 respondents, and those whose perineal wounds healed normally were 3 respondents. So based

on the results of the researcher's analysis regarding perineal care and good perineal wound healing at the high school education level.

According to Notoatmodjo (2018), the respondent's education, which was at the upper secondary level, made it easy for the respondent to receive information and understand what to do, what foods to consume and avoid in order to speed up wound healing. In addition, mothers understand that perineal care can speed up wound healing. Judging from the level of education, the majority of postpartum mothers had a high school education, 6 respondents (60%). Based on the results of the researcher's analysis regarding perineal wound care in respondents with a high school education level, there were 4 respondents who experienced fast healing of perineal wounds, and 3 respondents who experienced normal perineal wound healing. Researchers assume that basically the level of education influences the mother's perineal care, postpartum mothers with a good level of education will have greater knowledge, when compared to postpartum mothers with low education.

### **Characteristics of Respondents Based on Parity**

Characteristics of parity in postpartum mothers, most mothers gave birth twice, 6 respondents (60%). Based on the results of the researcher's analysis regarding perineal wound care in respondents with multigravidarum mothers, there were 4 respondents who experienced perineal wound healing quickly and there was 1 respondent who was a primigravidarum mother quickly and 4 respondents who were multigravidarum mothers and 1 respondent who was a primigravidarum mother who experienced perineal wound healing in a normal time. However, based on the analysis obtained by postpartum mothers with good perineal wound care, most of them were found in mothers who had given birth more than once, namely 8 respondents. Where postpartum mothers who have given birth previously will understand more about how to care for the perineum properly.

According to Arikunto (2018), experience is the best teacher. Because experience is a source of knowledge or a way to obtain the truth. If someone has given birth to their second child and so on, they can generally carry out good perineal care because they have gained experience and information from the birth of their previous child. Based on research results, it is known that there is a significant relationship between parity and the length of healing of perineal wounds in post-partum mothers. Mothers with high parity (often pregnant and giving birth) can cause the mother to experience problems with nutritional needs and nutritional status, which can often affect wound healing. The results of this study are not in line with Nurjanah (2017), who stated that there is no relationship between parity and the length of healing of perineal wounds. According to researchers, there is a relationship between parity and the length of healing of perineal wounds in this study because many respondents had low parity. Mothers with low parity will pay more attention to nutrition during pregnancy and the postpartum period so that their nutritional needs are well met to help the recovery process during the postpartum period.

### **Frequency of Respondents Based on Length of Wound Healing in Postpartum Women**

Frequency of respondents in the control group and intervention group based on the length of healing of wounds in postpartum women in PMB Hermilawati, Suka Mulya Village, Lempuing District in 2023. It can be seen that of the 10 postpartum mothers in PMB Hermilawati, Suka Mulya Village, Lempuing District who were not given boiled water from binahong leaves, 5 respondents (100%) postpartum mothers who experienced normal healing and all postpartum mothers in PMB Hermilawati Suka Mulya Village, Lempuing District who were given boiled water from binahong leaves, all postpartum mothers who experienced rapid wound healing, namely 5 respondents (100%). This is in accordance with the theory of

Surjantini (2018), which states that giving postpartum mothers boiled water from binahong leaves is very good for healing perineal wounds. The antiseptic content in the binahong plant can kill germs, increase resistance to infection, and speed up wound healing.

Strengthened by the results of Widyastuti's research, it proves that scientifically the benefits of binahong are that it can treat wounds. This is because binahong leaves contain active compounds of flavonoids, alkaloids, terpenoids and saponins. Nurul added that in his research he also stated that as a wound medicine, binahong contains several chemical ingredients, namely flavonoids, alkaloids, protein, saponins and ascorbic acid. It can be concluded that this research shows that boiled water from binahong leaves can accelerate the reduction in the size of perineal wounds. This shows the healing process of perineal wounds in postpartum mothers, this ability cannot be separated from the active compounds contained in binahong leaves.

#### **Average Healing of Perineal Wounds in the Intervention Group for Postpartum Women**

Based on the average perineal wound healing in the intervention group, the average perineal wound healing when given boiled water from binahong leaves experienced good wound healing was 5 respondents (50%). This research shows that boiled water from binahong leaves is able to accelerate the reduction in the size of perineal wounds, this shows that the healing process of perineal wounds in postpartum mothers occurs, this ability cannot be separated from the content of active compounds, namely Saponins, Flavonoids, Alkaloids and Collagen (Vit C) which found in binahong leaves which can speed up the healing of perineal wounds in postpartum mothers. The wound healing process is interrelated, starting from reducing the size of the wound followed by reducing the redness of the perineal wound in postpartum mothers, at the beginning of the occurrence of perineal wounds in postpartum mothers, the appearance of a dense reddish color and changes to a pale red color or fading from before within 5 days. Treat wounds using boiled water from binahong leaves. Edema is a form of wound inflammation, in this process there is increased flow through the arteries to the damaged tissue which aims to attract plasma proteins and cells to the wound surface to avoid secondary infections entering.

This is in accordance with research by Pratiwi (2020) which revealed that treating perineal wounds with boiled water from binahong leaves for postpartum mothers was very influential in speeding up the healing process of perineal wounds and was also supported by research from Larissa (2017) which stated that binahong leaves have anti-inflammatory activity, analgesic and antioxidant. Through this function, binahong leaves are able to accelerate the healing of second degree burns. From the results of statistical tests, it was found that there was a significant difference in wound healing between the wound healing in the intervention group and the provision of boiled water from binahong leaves. Based on these results, it can be concluded that there was an increase in healing of perineal wounds in postpartum mothers who were given boiled water from binahong leaves. In the intervention group, 5 postpartum mothers experienced good healing of perineal wounds.

#### **Average Healing of Perineal Wounds in the Control Group of Postpartum Women**

Based on the average perineal wound healing in the control group, the average perineal wound healing that was not given boiled water from binahong leaves experienced poor wound healing as many as 5 respondents (50%). The results of the study showed that the healing time for perineal wounds in postpartum mothers who were not given boiled water from binahong leaves experienced normal healing, namely 5 respondents (100%). This is in accordance with Handayani's (2014) statement, which states that healing of perineal wounds is said to improve

if new tissue is formed covering the perineal wound within 6 days postpartum. The healing assessment criteria is said to be fast if the wound heals within 6 days and slow if the wound heals more than 6 days. Based on research by Kuntoro (2018), the healing of wounds in perineal tears will vary, some heal normally (6-7 days) and some experience delays in healing. Based on these results, it can be concluded that there was no increase in healing of perineal wounds in postpartum mothers who were not given boiled water from binahong leaves. In the control group, healing of perineal wounds without being given boiled water from binahong leaves lasted longer than treatment given boiled water from binahong leaves, namely perineal wounds. will heal in a minimum of 6 days and a maximum of 7 days.

### **Normality test**

Based on the output test results of the normality test in the Shapiro-Wilk test section, it was found that the healing of perineal wounds in the intervention group obtained a sig value of 0.000, while the healing of perineal wounds in the control group obtained a sig value of 0.048. This is in accordance with Ghozali's (2018) theory, which states that the normality test aims to find out whether each variable is normally distributed or not. The normality test is needed to carry out tests on other variables with the assumption that the residual value follows a normal distribution. If this assumption is violated then the statistical test becomes invalid and parametric statistics cannot be used with the basis for decision making being as follows: a. If the significance or probability value is  $<0.05$ , it can be concluded that the data tested is not normally distributed. B. If the significance or probability value is  $> 0.05$ , it can be concluded that the data tested is normally distributed. Because the p-value is  $0.000 < 0.05$ , it can be concluded that the data is not normally distributed, so the Mann Whitney Test was carried out.

### **The Effect of Giving Boiled Water from Binahong Leaves on the Acceleration of Healing of Perineal Wounds in Postpartum Women**

Based on the results of the Mann Whitney Test, it was obtained that the highest number of respondents were in the intervention group, namely the group that was given boiled water from binahong leaves, the majority of perineal wound healing was in the good category with 5 respondents (50%) and in the control group, namely the group that was not given boiled water from the leaves. binahong, the majority of perineal wound healing was in the poor category as many as 5 respondents (50%).

The results obtained from the Man Whitney test to compare perineal wound healing in the intervention group and the control group were obtained in the intervention group at 3.00 with a Sum of Ranks value of 15.00. Meanwhile, in the control group the Mean Rank was 8.00 with a Sum of Ranks value of 40.00 with a Z value of -2.677 and a p-value ( $0.007 < \alpha (0.05)$ ), so  $H_0$  was rejected and  $H_a$  was accepted, which means that the perineal wound healing process in the intervention group faster than the control group. This shows that there is a significant difference between the intervention group and the control group. This is in accordance with the theory of Ghozali (2018), which states that the Mann-Whitney Test is used to determine whether or not there are differences between two independent samples. The Mann-Whitney test is a non-parametric test which is an alternative to the t-test (parametric test). The basis for decision making for the Mann Whitney non-parametric test is as follows: a. If the Asymp.Sig. (2-tailed) value is  $> 0, 05$ , then  $H_0$  is not rejected, b. If the value of Asymp.Sig.(2-tailed)  $< 0.05$ , then  $H_0$  is rejected.

And reinforced by the results of Widyastuti's research, scientifically proving that the benefits of binahong are that it can treat wounds. This is because binahong leaves contain active

compounds of flavonoids, alkaloids, terpenoids and saponins. Nurul added that in his research he also stated that as a wound medicine, binahong contains several chemical ingredients, namely flavonoids, alkaloids, proteins, saponins and ascorbic acid (Indrayani, et al, 2020).

Based on the results of Wijayanti's research (2017), 70% of postpartum mothers who experience perineal lacerations or wounds, to overcome perineal wound healing quickly so that infection does not occur, use boiled water from binahong leaves, the perineal wound will dry quickly compared to not using boiled water. binahong leaves. Based on the research results of Surjantini (2018), giving postpartum mothers boiled water from binahong leaves is very good for healing perineal wounds. The antiseptic content in the binahong plant can kill germs, increase resistance to infection, and speed up wound healing. Based on these results, it can be concluded that the results of statistical tests using the Mann Whitney test obtained a P-value of 0.007. Where the significance value is smaller than the  $\alpha$  value ( $0.007 < 0.05$ ), which means that  $H_0$  is rejected, meaning that there is a significant difference in the healing time of perineal wounds using treatment with boiled water from binahong leaves and treatment without boiled water. binahong leaves.

## **CONCLUSION**

After conducting research and observations on 10 respondents and relating them to theoretical observations, it can be concluded that: Based on the age characteristics of respondents in the intervention and control groups, 8 respondents were 20-35 years (80%), the educational characteristics of respondents in the intervention and control groups were high school, 7 respondents (70%), and the parity characteristics of respondents were multigravida mothers, 8 respondents (80%). On average, 5 respondents (50%) experienced wound healing in the good category when given boiled water from binahong leaves. Meanwhile, on average, 5 respondents (50%) experienced healing of perineal wounds without being given boiled water from binahong leaves. So there was an effect of giving boiled water from binahong leaves on the healing of perineal wounds of postpartum mothers in the intervention group with a P value of 0.007 (P – value < 0.05).

## **REFERENCES**

- Arikunto, S. (2018). *Basics of Educational Evaluation*. Jakarta; Literary Earth
- Republic of Indonesia Ministry of Health. *Health Service Profile* (online). (2019).  
<http://www.dinaskota.com> (Accessed March 2 2023 at 19.15 WIB)
- Fatimah Prasetya. (2019). *Perineum Massage*. Yogyakarta; Science House
- Ghassani, M. (2020). Postpartum Mothers' Knowledge Regarding Healing Perineal Wounds Using Booklets. *Midwifery Journal*. 6(4).
- Ghozali, Imam. (2018). *Application of Multivariate Analysis Using the IBM SPSS 26 Program*. Diponegoro University Publishing Agency: Semarang
- Handayani. (2015). *Factors that influence the healing of perineal wounds in postpartum mothers*. Magelang: Midwifery Department Magelang: Semarang Health Polytechnic
- Hidayat. (2018). *Research Types and Designs*. Jakarta: EGC ISBN ; 979-044-022-7
- Indrayani, T., Solehah, FM, and Widowati, R. (2020). Effectiveness of Boiled Water from Binahong Leaves on Healing Perineal Ruptures in Maternity Women at the Menes

- Health Center, Pandeglang Regency. *Journal of Women's Health Quality*; 3(2), 177-184.
- Kuntoro, AR. (2018). Application of Boiled Water from Binahong Leaves for Healing Perineal Wounds at Pmb Diana Yulita Sawangan Alian Kebumen. Doctoral dissertation; Muhammadiyah Gombong Stickers).
- Larissa U, Wulan AJ, Prabowo AY. (2017). The Effect of Binahong on Second Degree Burns. *J Major*. Published online 2017.
- <http://jke.kedokteran.unila.ac.id/index.php/majority/article/view/1758> (Accessed 25 January 2023 at 20.00 WIB)
- Mayangsari. (2020). *Midwifery Care During the Postpartum Period*. Jakarta: Salemba Medika
- Nurjanah, et al. (2017). Relationship between characteristics and behavior of postpartum mothers in preventing perineal wound infections at Roemani Muhammadiyah Hospital, Semarang. *Proding National Seminar Publication of Research Results and Community Service at Muhammadiyah University Semarang*. *Midwifery journal*; 36-347
- Notatoatmojo. (2018). *Health Research Methodology*. Jakarta: Rineka Cipta
- Pratiwi Kusuma, SD. (2020). Treatment of Perineal Wounds Using Boiled Water from Binahong Leaves in Postpartum Mothers. Doctoral dissertation; Tanjung Karang Health Polytechnic.
- Rahmawati I. Differences in the Effects of Wound Treatment Using Crushed Chinese Petai Leaves (*Leucaena glauca*, Benth) and Povidone Iodine 10% in Accelerating Clean Wound Healing in Marmots (*Cavia porcellus*). *J Wiyata*. Published online 2014.
- <https://ojs.iik.ac.id/index.php/wiyata/article/view/40>(Accessed January 26 2023 at 19.00 WIB)
- Safitri, V. (2022). Income of the Community Around the Malino Natural Tourism Park Area, Lembanna Pine Forest in Gowa Regency, South Sulawesi Province. *Papuan Forestry Journal*; 8(2): 262-268
- Saifuddin. (2019). *Post partum infection*. Jakarta: Indonesian Ministry of Health
- Selawa W, et al. (2013). Flavonoid Content Total Antioxidant Capacity Ethanol Extract of Binahong Leaves [*Anredera cordifolia* (Ten.) Steenis.. *Pharmaceutical Scientific Journal*. Volume (1): 18-22
- Sugiyono. 2017. *Quantitative, Qualitative, R&D Research Methods*. Bandung: Alfabeta
- Surjantini RRS, Siregar Y. (2018). Effectiveness of Simplicia Boiled Water from Binahong Leaves (*Anredera Cordifolia* (Tenore Steen) for Healing Perineal Wounds in Postpartum Women at the Murniati Clinic, West Kisaran City District. *Midwifery Journal*: 4 (2): 134-140)
- Wijayanti. (2017). *New family home care* In: Martison Im, Widner AG, Portillo CJ Home health care. Phila Delphia: WB Saunders.
- Winkjosastro, (2018). *Obstetrics, gynecological disease and family planning for midwife education*. Jakarta: Rineka Cipta.