



The Effectiveness of Red Ginger Decoction Water to Accelerate The Healing of Perineal Laceration Wounds in Physiological Puerperal Mothers

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ABSTRACT

A perineal wound is a wound on the area between the vulva and the anus that occurs during the labor process. Wounds can heal if properly treated. Treatment of perineal wounds can be helped by non-pharmacological means.¹ Herbal ingredients that can be used in accelerating the healing of perineal wounds are red ginger boiled water (*Zingiber officinale* Var. *Rosc. Rubrum*). The content of red ginger compounds has an active substance that functions as an anti-inflammatory, namely gingerol.² The design of this study used quasi-experimentation with a posttest only control group design with a total sample of 20 respondents, taken by consecutive sampling. Results: respondents who were given treatment by giving red ginger boiled water were said to be cured, namely. as many as 10 patients (100%), while respondents who were not given treatment by giving red ginger boiled water were said to be not cured, namely as many as 8 patients (80%). From the results of the study using the Mann Whitney U statistical test, the Z value was -3,559. The Sig value or P Value is $0.000 < 0.05$. If the p value of the $<$ the critical limit is 0.05. Discuss: Drinking red ginger decoction water is effective in accelerating the healing of perineal wounds in puerperal mothers.

Keywords: Perineal Wounds, Wound Healing, Red Ginger Decoction

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INTRODUCTION

The puerperium period is the period after the birth of the placenta and ends when the obstetric devices return to the way they were before pregnancy. There are several risks that may occur at that time, including: anemia, pre-eclampsia / eclampsia, post partum bleeding, puerperal depression, and puerperal infections. ¹Among these risks there are two that most often result in death in puerperal mothers, namely infection and bleeding. Puerperal infections can be caused from perineal wounds that do not heal. Perineal wounds are wounds on the area between the vulva and anus occurring during labor. Wounds can heal if treated properly. The process of healing wounds normally lasts for 6-7 days after delivery. Around us there are herbal ingredients that can be used in accelerating the healing of perineal wounds, this ingredient is easy to obtain and process it is red ginger boiled water (*Zingiber officinale* Var. *Rosc. Rubrum*). The content of red ginger compounds has an active substance that functions as an anti-inflammatory, namely gingerol. Treatment of perineal wounds can be helped by non-pharmacological means. From the initial survey conducted by researchers from 10 physiological puerperal mothers with perineal injuries at the Gayaman Health Center, Mojoanyar District, Mojokerto Regency, 8 people (80%) physiological puerperal mothers experienced perineal tears, 2 people (20%) did not experience perineal tears. and 9 people (90%) agreed herbal remedies could accelerate the healing of perineal wounds.

The Maternal Mortality Rate (MMR) is an indicator of the degree of health of a nation, in the world there are deaths in mothers of 42 people every day, while in Indonesia in 2019 it is still 305 per 100,000 live births even though the target of the Millennium Development Goals (MDGs) is 102 per 100,000 live births. According to a report from WHO, maternal deaths generally occur due to, and post-pregnancy complications. As for the types of complications that cause the majority of maternal deaths – about 75% of total maternal mortality cases are bleeding, infection, high blood pressure during pregnancy, complications of childbirth, and unsafe abortion. Puerperal infections can be caused from perineal wounds that do not heal. Prevalence of maternity mothers who have perineal injuries in Indonesia with suture wound infection by 5%, bleeding by 7% and death in postpartum mothers by 8%. In Indonesia, lacerations or perineal wounds are experienced by 75% of mothers giving birth to pervaginam. In 2013 it found that out of a total of 1951 spontaneous births of pervaginam, 57% of mothers got perineal sutures (28% due to episiotomy and 29% due to spontaneous tearing). ⁴

Childbirth often leads to tearing of the perineum in both primigravida and multigravida with a rigid perineum. Often perineal tears occur during childbirth and their containment is an obstetric problem.⁵ Perineal wounds are Birth canal tears that occur during childbirth either using spontaneously or episiotomy. Birth canal tears are the second cause of postpartum bleeding after uterine atony. Tear wounds The perineum is usually mild but there can also be extensive injuries that can cause bleeding that can endanger the mother's life. Perineal wounds that are not treated properly can hinder wound

healing and result in infection. ⁶ The impact that occurs when wound healing is hampered is very unpleasant for the mother such as pain and fear of moving, so it can cause many problems including uterine sub-involution, non-smooth lochea discharge, and post-partum bleeding which is the first cause of maternal death in Indonesia. ²

Efforts to prevent the occurrence of perineal laceration infection can be given with pharmacological therapy and nonpharmacological therapy. Pharmacological therapy is with the administration of antibiotic and antiseptic drugs (povidone iodine) for the treatment of perineal wounds. However, these drugs and ingredients have side effects such as allergies, inhibiting the manufacture of collagen which serves for wound healing. While nonpharmacological therapies that can be given to accelerate wound healing so that infection does not occur, one of which is using a decoction of red ginger. ³

METHOD

The research design used in the study was Quasy Experimental with the type of Posttest Only Control Group Design. The population in this study is all physiological puerperal mothers who are treated at the Gayaman Health Center, Mojoanyar District with a total of 25 orang, while the sample in this study was Mrs. Puerperal Physiologist who was treated at the Gayaman Regional Health Center, Mojoanyar District with a total of 20 people.

The variables in this study were Giving Red Ginger Boiled Water and Perineal Wound Healing using a research instrument in the form of an observation sheet with a REEDA scale. This research is planned to be carried out at the Gayaman Health Center, Mojoanyar District. In this study the analysis used the Mann Whitney test. The Sig value or P Value is $0.000 < 0.05$.

RESULTS

Table 1. Univariate Analysis Results

No	Characteristic Respondents	f	%
1.	Age	10	50
	Age 20-35 years		
	Age > 35 years	10	50
	Total	20	100
2	Education		
	Primary school	2	10
	Junior/Senior High School	13	65
	college	5	25
	Total	20	100
3	Parity		
	IRT/Housewives	3	15
	Other	17	85
	Total	20	100

Puerperal Woman Physiologist in the Gayaman Health Center Area, Mojoanyar District with the age of 20-35 years, namely as many as 10 people (50%) and the age of >35 years is also as many as 10 people (50%). The majority of Physiological Postpartum mothers with junior high school / high school education are 13 people (65%) and the minority of physiological postpartum mothers with elementary school education are 2 people (10%). the majority of physiological puerperal mothers who work as many as 17 people (85%) and the minority physiological puerperal mothers which became IRT in the Fak Fak Tengah Puskesmas Area, which was 3 people (15%). the majority of physiological puerperal mothers who are primipara as many as 7 people (35%) and the minority of physiological postpartum mothers are multipara as many as 13 people (65%).

Table 2 Results of Research on Specific Data of Respondents Given Treatment

Education	Breast Care				Total		P. Value	OR (CI 95%)
	Unfavorable		Favorable		n	%		
	f	%	f	%				
Low	73	85,9	12	14,1	85	100	0,000	9,257 (4.135-20.725)
High	23	39,7	35	60,3	58	100		

Table 3 Results of Special Data Research of Respondents Who Were Not Given Treatment

Giving boiled water of red ginger	Wound healing							
	Good wound healing		Moderate Wound Healing		Poor wound healing		Sum	
	f	%	f	%	f	f	%	%
Tidak Diberikan	0	0	8	80	2	20	10	100

P Value is $0.000 < 0.05$. If the p value < the critical limit is 0.05 then there is a meaningful difference between the two groups or the test result is statistically significant which means H1 is accepted.

DISCUSSION

1. Perineal Wound Healing in Mothers given Red Ginger Boiled Water

From the results of the study, it showed that perineal wounds in mothers who were given red ginger boiled water drink were proven to have good wound healing in less than 5 days.

The puerperium begins after the birth of the placenta and ends when the obstetric apparatus returns to what it was before pregnancy, the puerperium lasts for approximately 6 weeks. A woman wants the birth canal to be reborn in a pre-pregnancy state and gives birth quickly because long pains can interfere with aktivitas dan rasa nyaman. ¹Berdasarkan hasil The research accelerated the healing process of perineal wounds is caused by several factors which include the environment, traditions, knowledge, socioeconomics, handling officers, maternal conditions, nutritional status, age, tissue management, haemorrhagi, hypoveleria, factor local oedema, deficit nutrisi, personal

hygiene, defisit oksigen, medikas, dan over Activities. Normally the wound can heal for 6-7 days if a mother can do the treatment properly, on the other hand if the wound is not treated properly, the wound healing process becomes longer and can cause infection.³

According to the researcher's assumption that the healing of perineal wounds in respondents who were given red ginger decoction was faster than respondents who were not given, this is due to the chemical content of red ginger which can accelerate the wound healing process.

2. Perineal Wound Healing in Mothers who are not given Red Ginger Boiled Water

From the results of the study, it was shown that perineal wounds in mothers who were not given red ginger boiled water drink had moderate wound healing, which was more than 5 days as many as 8 respondents. There were also those who experienced poor wound healing as many as 2 respondents.

The process of accelerating perineal wound healing is caused by several factors including environment, traditions, knowledge, socioeconomics, officer handling, maternal condition, nutritional status, age, tissue management, haemorrhagi, hypoveleria, local oedema factor, nutritional deficit, personal hygiene, oxygen deficit, medical, and over activities⁸. Normally the wound can heal for 6-7 days if a mother can do the treatment properly, on the other hand if the wound is not treated properly, the wound healing process becomes longer and can cause infection.³

According to the researcher's assumption that the healing of perineal wounds in respondents who were not given red ginger decoction was longer than respondents who were given red ginger boiled water, this is due to the chemical content of red ginger which can speed up the wound healing process and there are also other factors that can affect the rapid healing of perineal wounds.

3. Effectiveness of Red Ginger Boiled Water to Accelerate the Healing of Perineal Laceration Wounds in Physiological Puerperal Mothers

From the results of the study using the Mann Whitney statistical test, the Sig Value or P Value was $0.000 < 0.05$. If the p-value of the $<$ critical limit is 0.05. then statistically there is a meaningful difference in wound healing time between groups that were not given boiled water of red ginger with a group of drinking boiled water of red ginger (*Zingiber officinale* Rosc Var rubrum). It states that clinically and statistically drinking red ginger boiled water is effective in accelerating the healing of perineal wounds in puerperal mothers.

This research is in line with the research conducted by Mersida Simarmata and Lisdayanti simanjuntak (2020), entitled the effectiveness of red ginger decoction (*zingiber officinale* var. Rosc. Rubrum) against the healing of perineal wounds. Types of research are Quasi Eksperiment dengan post test only control group. Perineal wound healing time in the respondent group drank median water 16 (min-max: 11-23) while the respondent group drank red ginger boiled water (*Zingiber officinale* Var.Rosc.Rubrum) median 13 (min-max:8-20).⁹ After being tested with the Mann-Whitney Test with a significant value of 0.002 ($p < 0.05$) there was a difference in the healing time

of puerperal maternal perineal wounds in both groups, namely the group drinking red ginger boiled water (*Zingiber officinale* Var. *Rosc. Rubrum*) recovered faster than the group drinking water.

Drinking a decoction of red ginger is given for 3 days from the first day to the third day because at this time inflammation occurs in the wound, while red ginger contains anti-inflammatory substances. This supports the wound healing process faster. At Previous studies have also found that ginger has been shown to function as an anti-inflammatory such as the Anti-Inflammatory Effect Test of Ethanol Extract of Ginger Rhizome (*Zingiber Officinale* Roscoe) in male white rats and proven to have decreased oedema on the soles of rat feet. It is also It is found in other researchers that ginger contains anti-inflammatory substances. At the time of the onset of the first day of neurotrophile injury from the blood vessels moving to the wound area to parasitize germs. 2 In previous studies it was also found that with Giving red ginger extract can reduce the amount of macropag. Means that few germs should be diagocytes on rat wounds.¹⁰

According to the researcher's assumption that perineal wound healing in respondents who were given red ginger decoction was faster than respondents who were not given, this is due to the chemical content of red ginger which can speed up the process wound healing. Perineal wound healing is fast because there are several influencing factors such as age factors, healthy reproductive age is 20-35 age for a woman to get pregnant and give birth, and nutritional factors, nutrients containing protein will increase the body's immunity.³

CONCLUSION

1. Perineal wound healing in mothers who received treatment as many as 10 respondents by giving red ginger boiled water for 5 days obtained good wound healing and healed less than 5 days as many as 10 (50%) respondents.
2. Perineal wound healing in mothers who were not treated or not given red ginger boiled water which was 8 (40%) respondents with moderate wound healing and 2 (10%) respondents with poor wound healing, for a duration of healing of more than 5 days.
3. The results of the statistical test with the Mann-Whitney Test showed a Sig Value or P Value of $0.000 < 0.05$. It is stated that drinking boiled water of red ginger is effective in accelerating the healing of perineal wounds in puerperal mothers.

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