

The Effect of Turmeric Acid on the Healing of Perineal Wounds in Postpartum Women in the PMB Karangploso Area, Malang District

Salama Asaluka Billah ^{1*}, Maulina Rifzul ², Keswara Nila Widya ³

¹ Department of Midwifery, Institute Technology Sains and Health RS dr Soepraoen
Jalan S. Supriadi No. 22, Sukun, Kec. Sukun, Kota Malang, Jawa Timur Indonesia

Email: billaasaluka30@gmail.com

Abstract

Keyword :
Perineal
wound,
Turmeric,
Tamarind

Background: Perineal rupture is a laceration or wound that develops along the perineum during labor, which can occur accidentally or intentionally (episiotomy). Perineal wounds resulting in childbirth can potentially cause infection because germs enter through stitches. Turmeric works in several stages to speed up wound healing. Turmeric (*Curcuma domestica* Val) contains curcumin compounds that can accelerate re-epithelialization, cell proliferation, and collagen synthesis. Tamarind works as antibacterial, anti-inflammatory, analgesic and antioxidant activity. **Objective:** to determine the effect of consumption of sour turmeric on perineal wound healing in Post Partum Mothers. **Method:** The type used in this study is a pre-experimental type with a intact-group comparison design. This study used variables with two groups, including the experimental group and the control group. The samples amounted to 32 postpartum mothers with perineal lesions. **Results:** Showed the effect of sour turmeric administration on healing perineal wounds (p -value 0.000). It is recommended for researchers to develop herbal treatments by giving sour turmeric, and for postpartum mothers to consume sour turmeric for healing perineal wounds. **Conclusion:** Based on the results of the Mann-Whitney Statistical test, it is known to Asymp. Sig. (2-tailed) / p -value is 0.000. Because there is an effect of sour turmeric on the healing of perineal wounds in puerperal mothers with p -value $< \alpha$ ($0.000 < 0.05$)

How To Cite : Billah, S.,A., Rifzul, M., Widya, K.,N., 2024. The Effect Of Acid Turmeric On The Healing Of Perineal Wounds In Postpartum Women In The PMB Karangploso Area, Malang District. *Journal of Islamic Medicine*.8(1),50-59,<https://doi.org/10.18860/jim.v8i1.21207>
Copyright © 2024

BACKGROUND

A phenomenon found in the community is that many women are afraid to give birth because of the stigma that giving birth will hurt and hurt the perineum.¹ The truth is that many mothers who give birth have wounds in the *perineum*. The perineum can occur spontaneously or intentionally (episiotomy). The perineum is the fourth cause of bleeding after uterine involution which can occur during labor (Moloku, 2013)². Therapy in health to prevent infection in perineal lacerations is pharmacological therapy and non-pharmacological therapy.

Pharmacological therapy or drug therapy, is defined as medical treatment that utilizes one or more pharmaceutical drugs to improve on – going symptoms (symptomatic relief), treat the underlying condition, or act as a prevention for other diseases. Is given through antiseptics and antibiotics but has side effects such as irritation, toxic reactions, sunburn, skin discoloration due to the dyes contained in Iodine and inhibits the formation of collagen which functions to accelerate wound healing *Curcuma longa* Linn).³ Nonpharmacological therapies that have been proven to accelerate wound healing are aloe vera, areca nut, papaya, tapak dara, gotu kola, taro, ginger, tamarind turmeric and binahong leaves. One of the herbal plants that has the potential to prevent infection in perineal lacerations is tamarind turmeric (*Curcuma longa* Linn).³

Turmeric contains anti-inflammatory (anti-inflammatory), antioxidants, anti-carcinogenic (anti-cancer), anti-infective and can prevent blood clots. Turmeric works in several stages to accelerate wound healing.⁴ Turmeric (*Curcuma domestica* Val) contains curcumin compounds which can accelerate re-epithelialization, cell proliferation, and collagen synthesis (Wientarsih et al, 2012).⁵ Tamarind works as an antibacterial, anti-inflammatory, analgesic and antioxidant activity.⁶

Based on a preliminary study conducted at PMB Cucu Isma Kec. Karangploso Kab. Malang on December 4 2022, there were 12 mothers giving birth in the working area of PMB Cucu Isma Kec. Karangploso Kab. Malang in November. Of the 12 mothers, 7 (58.3%) of them had perineal injuries with degree 2, 3 (25%) of them gave birth without lacerations and 2 (16.7%) of them *hadepisiotomy*.

This figure *shows* that most of the mothers who gave birth at PMB Cucu Isma Kec. Karangploso Kab. Malang suffered an injury to the mother's perineum and in the preliminary study it was conducted at PMB Sri Wahyuni Kec. Karangploso Kab. Malang on January 25 2023, there were 15 mothers giving birth in the working area of PMB Sri Wahyuni Kec. Karangploso Kab. Malang in December. Of the 15 mothers, 10 (67%) of them had perineal injuries with degree 2, 1 (6%) of them gave birth without lacerations and 4 (27%) of them *hadepisiotomy*. This figure *shows* that most of the mothers who gave birth at PMB Sri Wahyuni Kec. Karangploso Kab. Malang suffered an injury to the mother's *perineum*.

Based on the description, the authors are interested in conducting research on "The Effect of Tamarind Turmeric on Wound Healing *Perineum* On Mother *Post Partum* at PMB Cucu Isma and PMB Sri Wahyuni Kec. Karangploso Kab. Malang".

METHOD

This research is a pre-experimental type research with design intact-group comparison. The variables in this study were divided into two groups, namely the experimental group and the control group. The research was carried out at PMB Kec. Karangploso area, Kab. Malang, East Java. Researchers conducted research ethics tests at the Health Research Ethics Committee of the Indonesian STRADA Institute of Health Sciences with Number: 3712/KEPK/III/2023. The research was conducted from March 2023 to April 2023.

The total sample in this study consisted of 32 postpartum mothers who shared 2 groups, namely 16 respondents in the intervention group and 16 respondents in the control group. Samples were obtained using Federer's formula. The sampling technique used was Purposive Sampling by taking cases or respondents who fit the inclusion criteria. Inclusion criteria: primiparous postpartum mothers and multiparous postpartum mothers who are willing postpartum mothers with second degree perineal injuries, respondents were given complementary therapy in the experimental group.⁷ Exclusion criteria: postpartum mothers who are not willing, postpartum mothers with complications.

The control group received standard treatment in the form of oral antibiotics (10 tablets of amoxicillin 500mg) taken 3 times a day. While the intervention group received standard treatment plus consumption of turmeric and tamarind. The condition of the perineal wound was a perineal wound with degree II that was stitched.^{8,9} The turmeric and tamarind used was made from turmeric and tamarind extract. The method of making turmeric and tamarind is with a dose of 1.5 grams of

turmeric and 0.5 grams of tamarind. The amount of warm water used is 150 ml. Turmeric and tamarind are drunk every morning after breakfast for 6 days.

Assessment of perineal wound healing using the REEDA value scale created by Davidson (1974).

This study was measured using the REEDA scale to assess perineal injuries associated with lacerations. The assessment was carried out on the 6th day postpartum. For each item assessed, a score between 0-2 indicates good wound healing, a score between 3-5 indicates moderate wound healing, a score of 6-8 indicates unhealthy wound healing, and a score of 9-15 indicates very poor wound healing (Alvarenga et al., 2015).⁸

The data analysis technique was first carried out by testing the normality of the data which obtained data that was not normally distributed so that bivariate analysis was carried out using the *Minn-Whitney* nonparametric statistical test to *analyzesig.(2-tailed)/p value* worth 0,000. This analysis technique is used to analyze The Effect of Tamarind Turmeric On Perineal Wound Healing.^{9,10,11}

Table 1. Assesment Of Perineal Wound Healing Using The REEDA Value Scale Created By

Mark	Redness	Edema	Echymosis	Discharge	Approximate
0	There isn't any	There isn't any	There isn't any	There isn't any	There isn't any
1	<0,25 cm	<1 cm	<0,25 cm	Serum	3mm
2	<0,5	1-2 cm	0,25-1 cm	Serosangul	Skin and subcutaneous fat
3	>0,5	>2 cm	>1 cm	Bloody, purulent	Skin, subcutaneous fat and fascia

Davidson (1974)

RESULT

Table 2. Characteristics of Respondents' Age, Education, Parity, and Occupation

Variable	Group			
	Intervention		Control	
	F	%	F	%
Age				
<20 years	1	6.3	2	12.5
20-35 years	12	75.0	11	68.8
>35 years	3	18.8	3	18.8
Education				
SD	2	12.5	2	12.5
SMP	5	31.3	4	25.0
SMA	8	50.0	9	56.3
DIPLOMA/PT	1	6.3	1	6.3
Parity				
Primipara	7	43.8	9	56.3
Multipara	9	56.3	7	43.8
Work				
IRT	8	50.0	5	31.3
Swasta	5	31.3	8	50.0
Wiraswasta	2	12.5	3	18.8
PNS	1	6.3	0	0

Table 3. Wound Healing REEDA Score Scale *Perineum* in the Intervention Group and Control Group

Scale REEDA	Group			
	Intervention		Control	
	F	%	F	%
0-2	14	87.5	3	18.8
3-5	2	12.5	8	50.0
6-8	0	0	4	25.0
9-15	0	0	1	6.3

Table 4. Identifying the Effect of Tamarind Turmeric on Wound Healing *Perineum* on Mother *Postpartum*

	Group	N	Mean Rank	Sum of Ranks
Wound healing	Control	16	22.31	357.00
	Experiment	16	10.69	171.00
	Total	32		
<i>Mann-Whitney Test</i>	<i>P value . 0,000</i>			

DISCUSSION

Based on the results of the study, the characteristics of respondents in the intervention group were 16 respondents according to age, most of whom were in the age range of 21-35 years, as many as 12 respondents (75%). While the control group had 16 respondents according to age, most of whom were in the age range of 21-35 years, as many as 11 respondents (68.8%).¹²

The results showed that the data for the intervention group regarding the last level of education were 8 respondents (50%) for high school, 5 respondents for junior high school (31.3%), 2 respondents for elementary school (12.5%) and 1 university respondent (6.2%). While the control group data regarding the last education level of high school respondents were 9 respondents (56.3%), junior high school 4 respondents (25%), elementary school 2 respondents (12.5%) and university 1 respondent (6.2%).

The level of education is a factor that determines the occurrence of behavioral changes, where a person can control the conditions of the experience (Notoatmodjo, 2012)¹³.

In the study, it was found that the intervention group of primipara parity respondents was 7 respondents (43.8%) and multipara 9 respondents (56.3%). While the control group of primipara parity respondents was 9 respondents (56.3%) and multipara 7 respondents (56.3%). Apart from that, from the parity factor, primiparous women have never had childbirth experience, including postpartum experiences or the postpartum period, which makes it difficult to anticipate.¹⁵ This influence is caused by the previous experience felt by multiparous mothers where this experience is one of the factors that can heal more perineal wounds.¹⁴

Results of the research of intervention group, 50% of the respondents were working and 50% were not working

.Meanwhile, the characteristics of the control group based on work were found in the results of the study. Most of the 11 respondents worked (68.8%) and 5 respondents did not work (31.3%). Mother's work can be related to the condition of fatigue experienced by the mother.^{18,19}

Based on the results of the Mann-Whitney Statistical test it is known *Asymp. Sig. (2-tailed) / p. value* worth 0.000. Because the value is 0.000 (< 0.05), it means that there is an effect of tamarind turmeric on the healing of perineal wounds, so it can be concluded there is a statistically significant influence between the intervention group and the control group.^{17,20} So giving tamarind turmeric is effective in healing perineal wounds in postpartum mothers.^{21,22,23}

CONCLUSION

Based on a study conducted on 32 respondents regarding the Effect of Giving Turmeric Tamarind on Healing Perineal Wounds in Postpartum Mothers at PMB Cucu Isma and PMB Sri Wahyuni Karangploso District, Malang Regency, it can be concluded that there is an effect of giving turmeric tamarind on healing perineal wounds in postpartum mothers..

THANK YOU

Thanks to God Almighty, where I conducted research on the effect of turmeric on wound healing *perineum* on mother *postpartum* at PMB Cucu Isma and PMB Sri Wahyuni it went smoothly and did not forget to thank ITSK RS dr. Soepraoen Malang who gave me the opportunity to compile this research article.

BIBLIOGRAPHY

1. A. Rohmin, B. Octariani, and M. Jania, "Faktor Risiko Yang Mempengaruhi Lama Penyembuhan Luka Perineum Pada Ibu Post

- Partum.,” *J. Kesehat.*, vol. 8, no. 3, pp. 449–454, 2017.
2. F. Moloku, B. Wantouw, and J. Sambeka, “Hubungan Pengetahuan Tentang Perawatan Dengan Penyembuhan Luka Episiotomi Pada Ibu Post Partum Di Ruang Irina D Bawah Rsup Prof Dr. Rd Kandou Malalayang.,” *J. Keperawatan*, vol. 1, no. 1, 2013.
3. P. Andanawarih, “Efektifitas Jamu Kunyit Asam Terhadap Penyembuhan Laserasi Perineum Di Kota Pekalongan.,” *Shine Cahaya Dunia Ners*, vol. 6, no. 1, pp. 30–37, 2021.
4. Andanawarih, Putri, and E. Al., *Monograf Khasiat Jamu Kunyit Asam Bagi Ibu Nifas*. NEM, 2021.
5. F. Hayati, “Personal Hygiene Pada Masa Nifas,” *J. Abdimas Kesehat.*, vol. 2, no. 1, pp. 4–8, 2020.
6. T. S. Mulati and D. Susilowati, “Pengaruh Derajat Robekan Perineum Terhadap Skala Nyeri Perineum Pada Ibu Nifas Di Kabupaten Wonogiri.,” *J. Kebidanan Dan Kesehat. Tradis.*, vol. 3, no. 1, 2018.
7. K. E. W. Astuti and S. R. Handajani, “Efektifitas Anti Inflamasi Formulasi Kunyit (Curcuma Longa), Daun Binahong (Anredera Cordifolia) Dan Daun Sambiloto (Andrographis Paniculata) Terhadap Luka Sayat Pada Kelinci.,” *Interes. J. Ilmu Kesehat.*, vol. 7, no. 2, pp. 211–221, 2018.
8. M. B. Alvarenga, A. A. Francisco, S. M. J. V. De Oliveira, F. M. B. Da Silva, G. T. Shimoda, and L. P. Damiani, “Episiotomy Healing Assessment: Redness, Oedema, Ecchymosis, Discharge Approximation (Reeda) Scale Reliability.,” *Rev. Lat. Am. Enfermagem*, vol. 23, no. 1, pp. 162–168, 2015, [Online]. Available: <https://doi.org/10.1590/0104-1169.3633.2538>
9. H. Latan, *Statistik nonparametrik*. Jakarta: Elex Media Komputindo, 2014.
10. Lapau, “Statistik nonparametric,” 2015, [Online]. Available: <http://meilanyonsi.upy.ac.id/files/statprak/nonparametrik.pdf>
11. Hariyanto, “Identifikasi Ibu Bersalin Yang Mengalami Ruptur Perineum Di Rumah Sakit Umum Dewi Sartika Provinsi Sulawesi Tenggara Tahun 2016,” Phd Thesis. Poltekkes Kemenkes Kendari, 2017.
12. F. Tridiyawati and N. Santika, “Kontribusi Pengetahuan Ibu Nifas Terhadap Penyembuhan Luka Perineum,” *J. Antara Kebidanan*, vol. 2, no. 2, pp. 54–72, 2019.
13. R. H. Ratih, “Pengetahuan Dan Sikap Ibu Nifas Tentang Perawatan Luka Perineum,” *J. Kesmas Asclepius*, vol. 2, no. 1, pp. 34–43, 2020.
14. D. Susanti, “Pengaruh Konsumsi Minuman Kunyit Asam Terhadap Lama Penyatuan Luka Perineum Ibu Nifas.,” *J. Kesehat. Dan Sains*, vol. 2, no. 1, pp. 48–55, 2018.
15. I. E. Crystanty, “Studi Kasus pemberian virgin Coconut Oil pada Penyembuhan Luka Perineum (Fase Inflamasi) Ibu Post Partum Dengan Episiotomi Derajat Ii Di Bps Ny. Sri Mulatsih Kecamatan Taman Kabupaten Sidoarjo,” (Doctoral Dissertation, Universitas Muhammadiyah Surabaya), 2018.
16. D. Lestari, “Perbedaan Efektifitas Rebusan Sirih Merah Dengan Kunyit Asam Terhadap Penyembuhan Luka Perineum= Comparison Of The Effectiveness Of Red Betel Leaf With Acid Turmeric On The Healing Of Perineal Wounds,” Phd Thesis. Universitas Hasanuddin, 2022.
17. F. Hamida, H. Herdini, and R. Oktaviani, “Cemaran Mikrob Pada Jamu Gendong Kunyit Asam Di Pancoran Mas, Depok, Jawa Barat,” *Sainstech Farma J. Ilmu*

- Kefarmasian*, vol. 15, no. 2, pp. 50–56, 2022.
18. M. Mole, “Hubungan Antara Tingkat Pengetahuan Tentang Vulva Hygiene Dan Pantangan Selama Nifas Dengan Lama Penyembuhan Luka Perineum Ibu Post Partum,” (Doctoral Dissertation, Universitas Jenderal Soedirman), 2019.
 19. P. Primadona and D. Susilowati, “Penyembuhan Luka Perineum Fase Proliferasi Pada Ibu Nifas.,” *Profesi (Profesional Islam. Media Publ. Penelit.*, vol. 13, no. 1, 2015.
 20. K. I. Sagala, “Pengetahuan Ibu Nifas Tentang Perawatan Luka Perineum Di Klinik Pratama Patumbak 2019,” Poltekkes Kemenkes Medan, 2020.
 21. Suliyanto, “Statistika parametik dan statistika nonparametik,” 2014, [Online]. Available: <http://ineddeni.wordpress.com/2007/08/02/statistika-parametrik-dan-statistika-nonparametrik/>
 22. Y. Suryati, E. Kusyati, and W. Hastuti, “Hubungan Tingkat Pengetahuan Ibu Nifas Tentang Perawatan Luka Perineum Dan Status Gizi Dengan Proses Penyembuhan Luka,” *J. Manaj. Keperawatan*, vol. 1, no. 1, 2013.
 23. S. S. T. Zubaidah, N. Rusdiana, M. Kep, M. Raihana Norfitri, S. S. T. Keb, S. S. T. Iis Pusparina, and M. M. Kes, *Asuhan Keperawatan Nifas*. Yogyakarta: Deepublish, 2021.