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EFFECTIVENESS OF TURMERIC-TAMARIND THERAPY ON PERINEAL WOUND HEALING IN POSTPARTUM MOTHERS FROM DAY 1 TO 7

Riza Arista Fitri[1], Anik Purwati[2]

[1,2]Prodi S1 Kebidanan, Fakultas Teknologi, Sains, dan Kesehatan. Institut Teknologi, Sains, dan Kesehatan RS dr. Soepraoen Malang, Indonesia, 65147
Email Correspondensi: rizaaristafitri@gmail.com

ABSTRAK : PENGARUH PEMBERIAN KUNYIT ASAM TERHADAP PENYEMBUHAN LUKA PERINEUM DERAJAT 2 PADA IBU POST PARTUM HARI KE 1–7

Latar Belakang: Robekan atau ruptur pada perineum merupakan kondisi yang umum terjadi selama proses persalinan, baik secara alami maupun akibat intervensi medis. Kunyit diketahui memiliki senyawa aktif seperti kurkumin yang mendukung proses penyembuhan luka melalui percepatan reepitelisasi, peningkatan proliferasi sel, serta sintesis kolagen. Di sisi lain, asam jawa mengandung senyawa dengan sifat antibakteri, antiinflamasi, analgesik, dan antioksidan. Tujuan: Untuk mengevaluasi pengaruh konsumsi kunyit asam terhadap percepatan penyembuhan luka perineum pada ibu pascapersalinan. Metode: Studi menggunakan desain pra-eksperimen dengan pendekatan kelompok intact yang dibandingkan. Sebanyak 32 ibu nifas dengan luka perineum derajat II dipilih menggunakan metode *purposive sampling* berdasarkan kriteria inklusi, lalu dibagi menjadi kelompok intervensi dan kelompok kontrol. Penilaian luka dilakukan menggunakan instrumen REEDA, dan data dianalisis menggunakan uji statistik *Mann-Whitney*. Hasil: Hasil uji Mann-Whitney menunjukkan nilai Asymp. Sig. (2-tailed) sebesar 0,000, yang lebih kecil dari nilai signifikansi 0,05. Ini menunjukkan bahwa terdapat perbedaan yang bermakna antara kedua kelompok. Oleh karena itu, hipotesis nol (Ho) ditolak dan hipotesis alternatif (Ha) diterima. Kesimpulan: konsumsi kunyit asam terbukti secara signifikan mempercepat proses penyembuhan luka perineum pada ibu postpartum hari ke-1 hingga ke-7 di PMB Bdn. Retnoningsih, S.Tr.Keb, Pagelaran dan PMB Bdn. Hj. Ririn Restatiningrum, S.ST., M.AP, Bululawang, Kabupaten Malang. Saran: Hasil penelitian ini dapat digunakan oleh responden, peneliti, tenaga kesehatan, dan masyarakat sebagai acuan dalam upaya penyembuhan luka perineum pasca persalinan dengan kunyit asam.

Kata kunci: Pemberian Kunyit Asam, Penyembuhan Luka, Ibu *Postpartum*

ABSTRACT

Background: Perineal rupture refers to a tear that occurs during childbirth, either spontaneously or due to medical intervention. Turmeric contains the active compound curcumin, which supports wound healing by accelerating re-epithelialization, enhancing cell proliferation, and stimulating collagen synthesis. Meanwhile, tamarind possesses antibacterial, anti-inflammatory, analgesic, and antioxidant properties. Objective: To assess the effect of turmeric-tamarind consumption on the healing of perineal wounds in postpartum mothers. Method: The research utilized a pre-experimental design with an intact group comparison approach. A total of 32 postpartum mothers with second-degree perineal tears were selected through purposive sampling based on inclusion criteria and divided into intervention and control groups. Wound healing was assessed using the REEDA scale, and data were analyzed using the Mann-Whitney statistical test. Results: The Mann-Whitney test yielded an Asymp. Sig. (2-tailed) value of 0.000, which is below the significance threshold of 0.05. This indicates a statistically significant difference between the intervention and control groups. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted. Conclusion: The consumption of turmeric-tamarind was found to significantly accelerate perineal wound healing in postpartum mothers from day 1 to day 7 at the Independent Midwifery Practices (PMB) of Bdn. Retnoningsih, S.Tr.Keb, Pagelaran, and Bdn. Hj. Ririn Restatiningrum, S.ST., M.AP, Bululawang, Malang Regency. Suggestion: The results of this study can be used by respondents, researchers, healthcare providers, and the community as a reference in efforts to heal perineal wounds postpartum using turmeric tamarind.

Keywords: Turmeric Tamarind, Wound Healing, Postpartum Mothers

INTRODUCTION

Globally, the World Health Organization (WHO) reported a decline in the Maternal Mortality Ratio (MMR) from 328 per 100,000 live births in 2000 to 197 per 100,000 in 2023, indicating a significant downward trend internationally, including in the Southeast Asia region. In Indonesia, this trend is also reflected in the United Nations report which stated that the MMR declined from 298.6 per 100,000 in 2000 to 172.9 per 100,000 in 2023 (WHO, 2025). According to the latest data from the WHO, Indonesia's MMR is still relatively high, ranging between 173 and 249 per 100,000 live births (WHO, 2025). This estimate indicates a decrease compared to previous years, such as the 2017 Indonesia Demographic and Health Survey (IDHS) which recorded an MMR of 305 per 100,000 live births (BPS Indonesia, 2018).

In East Java, the Maternal Mortality Ratio (MMR) experienced a slight increase in 2023 compared to the previous year. In 2020, the MMR was recorded at 98.40 per 100,000 live births. This figure rose sharply in 2021 to 234.7 per 100,000 live births, before dropping significantly to 93.00 per 100,000 in 2022. However, in 2023, the figure rose slightly again to 93.73 per 100,000 live births. Although the MMR in East Java has met the targets set in the Strategic Plan and the Intercensal Population Survey (Supas), efforts to reduce maternal mortality must still continue. The leading causes of maternal death in East Java in 2023 were preeclampsia, followed by hemorrhage and infection (Dinkes Jatim, 2023). One of the maternal death causes that remains a serious concern is postpartum infection, including those resulting from perineal wounds. A study published in 2024 reported that infections contribute to about 5 to 10 percent of all maternal deaths. Although this is a decrease from 15 percent a decade ago, infection remains an important risk factor (Depkes RI, 2022; Kurnia et al., 2024).

Perineal injury is one of the common complications during normal delivery. This injury may occur spontaneously due to pressure during labor, or as a result of medical intervention such as an episiotomy (Marina et al., 2017). Trauma to the perineal area involves damage to the tissues surrounding the labia, vagina, urethra, clitoris, perineal muscles, and in some cases, the anal sphincter. Perineal tears—whether spontaneous or iatrogenic—typically occur during the second stage of labor as the baby is being delivered (Ramar et al., 2025). Various elements may influence the recovery process of perineal injuries in women after childbirth. Mothers without certain medical conditions such as anemia or diabetes mellitus, and those with good nutritional status—as indicated by Body Mass Index (BMI)—tend to experience better recovery. A complication-free labor process further supports effective perineal recovery (Wiknjosastro, 2017). During the postpartum period, mothers who experience perineal tears are at high risk of complications if the wound is not treated properly. An untreated perineal wound may become a gateway for infection, which can hinder the healing process and increase postpartum morbidity risks (Montessori et al., 2021). Therefore, mothers must have a good understanding of proper wound care techniques. Correct and consistent wound care has been shown to accelerate healing and reduce the risk of infection and other complications (Potter & Perry, 2020).

A possible strategy for addressing first- and second-degree perineal tears in postpartum mothers is the application of non-pharmacological methods as alternative treatments (Priyanti et al., 2024). One such therapy is the consumption of turmeric-tamarind herbal drink (*jamu kunyit asam*), which is widely recognized for its multiple wound-healing benefits. Turmeric contains active compounds such as curcumin, which possess anti-inflammatory, antioxidant, anti-carcinogenic, and anti-infective properties, along with blood clot prevention effects. These pharmacological actions contribute to its effectiveness in accelerating the healing of damaged tissues (El-Saadony et al., 2023). Turmeric plays a role in several wound healing phases, including reducing inflammation and promoting cell regeneration. Meanwhile, tamarind also possesses antibacterial, anti-inflammatory, analgesic, and antioxidant properties. The active compounds in tamarind can accelerate open wound healing by enhancing tissue contraction and facilitating epithelial cell migration at the wound site (Akbik et al., 2014). The combination of these two natural ingredients is believed to provide therapeutic effects that support faster and safer perineal recovery without the side effects of chemical drugs.

RESEARCH METHODS

Population in this study consisted of all postpartum mothers at the Independent Midwifery Practice of Bdn. Retnoningsih, S.Tr.Keb, Pagelaran, and PMB of Bdn. Hj. Ririn Restatiningrum, S.ST., M.AP, Bululawang, Malang Regency, with a total population of 32 individuals. The research involved 16 participants in the treatment group and another 16 in the control group. Participants were postpartum mothers selected based on the following

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inclusion criteria: (1) primiparous or multiparous mothers at the two PMB locations, (2) willingness to participate in the study, (3) presence of second-degree perineal wounds, and (4) receipt of complementary therapy in the form of a turmeric-tamarind herbal drink for those in the experimental group.

The experimental group received an intervention consisting of the consumption of a turmeric-tamarind herbal mixture. Turmeric is an herbal plant that contains the active compound curcumin, while tamarind contains phenolic compounds that enhance antioxidant activity (Buanasari et al., 2018; Hayakawa et al., 2011). The combination of these two ingredients is believed to accelerate the healing process of perineal wounds. The herbal mixture was prepared by grating three finger-length pieces of turmeric, then mixing it with 150 ml of water, adding ¼ teaspoon of tamarind, and 1 tablespoon of honey. This mixture was given to postpartum mothers with second-degree perineal wounds to be consumed every morning for seven days after delivery. Data for this study were gathered using a Standard Operating Procedure (SOP) sheet and an observation sheet containing REEDA indicators (Redness, Edema, Ecchymosis, Discharge, Approximation) (Alvarenga et al., 2015). The REEDA scale was used from day 1 to day 7 with an observation sheet to assess the wound healing process in both the control and intervention groups.

RESEARCH RESULTS

Results of Respondents' Characteristics Identification

Respondents' Characteristics Based on Age

Based on the general data, the study identified the following age characteristics of the respondents:

Tabel 1
Respondents' Characteristics Based on Age

Age	Control		Experiment	
	F	%	F	%
< 20 y.o	1	6.25	2	12,50
20-35 y.o	12	75.00	13	81,25
> 35 y.o	3	18.75	1	6,25

Among the 16 respondents in the experimental group who received turmeric and tamarind treatment, the majority were aged between 20–35 years, totaling 13 respondents (81.25%). Meanwhile, in the control group consisting of 16 respondents who did not receive turmeric and tamarind, most were also in the 20–35 age range, totaling 12 respondents (75%).

Respondents' Characteristics Based on Education Level

Based on the general data, the study identified the following education level characteristics of the respondents:

Tabel 2
Respondents' Characteristics Based on Education Level

Education Level	Control		Experiment	
	F	%	F	%
SD	3	18.75	2	12.50
SMP	5	31.25	5	31.25
SMA	8	50.00	9	56.25
DIPLOMA/PT	0	0.00	0	0.00

Among the 16 respondents in the experimental group who were given turmeric and tamarind, the majority had a senior high school education, totaling 9 respondents (56.25%). In the control group, which did not receive turmeric and tamarind, half of the respondents also had a senior high school education, totaling 8 respondents (50%).

Respondents' Characteristics Based on Occupation

Based on the general data, the study identified the following occupation characteristics of the respondents:

Tabel 3
Respondents' Characteristics Based on Occupation

Pekerjaan	Control		Experiment	
	F	%	F	%
Housewives	6	37.50	8	50.00
Privat Sector	7	43.75	4	25.00
Entrepreneur	3	18.75	3	18.75
Civil Servant (PNS)	0	0.00	1	6.25

Among the 16 respondents in the experimental group who were given turmeric and tamarind, half were housewives, totaling 8 respondents (50%). Meanwhile, in the control group that did not receive the turmeric and tamarind treatment, the majority worked in the private sector, totaling 7 respondents (43.75%).

Respondents' Characteristics Based on Maternal Parity

Based on the general data, the study identified the following maternal parity characteristics of the respondents:

Tabel 4
Respondents' Characteristics Based on Maternal Parity

Parity	Control		Experiment	
	F	%	F	%
Primipara	9	56.25	6	37.50
Multipara	7	43.75	10	62.50

Among the 16 respondents in the experimental group who received turmeric and tamarind, the majority were multiparous mothers, totaling 10 respondents (62.5%). Meanwhile, in the control group that did not receive turmeric and tamarind, the majority of respondents were primiparous, totaling 9 individuals (56.25%).

Particular Data

Perineal Wound Healing Among Postpartum Mothers in the Control Group During Days 1–7

The findings indicated that the REEDA scores observed in the control group represented the perineal wound healing process in postpartum mothers, as illustrated in the table below:

Table 5
Perineal Wound Healing in Postpartum Mothers on Days 1–7 in the Control Group

REEDA Scores	Control	
	F	%
0-2	2	12.50
3-5	8	50.00
6-8	5	31.25
9-15	1	6.25

Among the 16 respondents in the control group who did not receive turmeric-tamarind, it was found that half of them had REEDA scores in the range of 3–5, totaling 8 respondents (50%). Meanwhile, a small portion of respondents had REEDA scores of 6–8, totaling 5 individuals (31.25%), scores of 0–2 totaling 2 individuals (12.5%), and scores of 9–15 totaling 1 individual (6.25%).

Perineal Wound Healing Among Postpartum Mothers in the Experimental Group During Days 1–7.

The research results showed that the REEDA scores in the experimental group reflected the healing process of perineal wounds in postpartum mothers. This can be seen in the table below:

Table 6
Perineal Wound Healing in Postpartum Mothers on Days 1–7 in the Experimental Group

REEDA Scores	Experiment	
	F	%
0-2	15	93.75
3-5	1	6.25
6-8	0	0.00
9-15	0	0.00

Among the 16 respondents in the experimental group who were given turmeric-tamarind, almost all had REEDA scores in the range of 0–2, totaling 15 respondents (93.75%). Meanwhile, only a small portion had REEDA scores in the range of 3–5, totaling 1 respondent (6.25%).

The Impact of Turmeric-Tamarind Consumption on Perineal Wound Healing in Postpartum Mothers During Days 1–7

Based on the results of the Mann-Whitney test, the following data were obtained:

Tabel 7
The Effect of Turmeric-Tamarind on Perineal Wound Healing in Postpartum Mothers on Days 1–7

	Kelompok	N	Mean Rank	Sum of Ranks
Skor Penyembuhan Luka	Kontrol	16	22.31	357.00
	Eksperimen	16	10.59	171.00
Uji *Mann-Whitney* P value 0,000				

The results indicated that the REEDA scores in the experimental group, which received turmeric-tamarind, were lower (mean rank = 10.69) compared to the control group (mean rank = 22.31). This finding suggests that the intensity of perineal wound healing was significantly better in the group that consumed turmeric-tamarind. As a result, the null hypothesis (H_0) was rejected while the

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alternative hypothesis (H_a) was accepted, confirming that the consumption of turmeric-tamarind had a statistically significant impact on the perineal wound healing process in postpartum mothers between days 1 and 7 at the Independent Midwifery Practices of Bdn. Retnoningsih, S.Tr.Keb in Pagelaran, and Bdn. Hj. Ririn Restatiningrum, S.ST., M.AP in Bululawang, Malang Regency.

DISCUSSION

Perineal Wound Healing Among Postpartum Mothers in the Control Group During Days 1–7

Analysis of the data revealed that 8 respondents (50%) in the control group had REEDA scores ranging from 3 to 5, while 1 respondent (6.25%) had a REEDA score ranging from 9 to 15. The Mann-Whitney statistical test yielded a mean rank of 22.31 with a standard deviation value of 357.00. In this study, the control group consisted of postpartum mothers who received oral antibiotic therapy at a dosage of 3 times per day but did not consume turmeric and tamarind as an additional therapy. These findings are consistent with the study by Hafanda et al., (2024), which stated that perineal wound healing can be approached through both pharmacological and non-pharmacological methods. Pharmacological approaches generally include the consumption of antiseptics and antibiotics. However, if perineal wound care is not performed optimally, the risk of infection increases, especially since the perineal area is moist and exposed to lochia, which supports bacterial growth. Such infections may further develop into complications such as urinary tract infections or infections of the birth canal (Rostika et al., 2020).

The inflammatory phase typically lasts from 1 to 4 days and is characterized by microcirculatory damage, which allows blood components—such as antibodies, plasma proteins, electrolytes, complement, and water—to infiltrate the vascular space over a period of approximately 2–3 days. This physiological response results in clinical symptoms including edema, increased warmth, erythema (redness), and pain (Fitridge & Thompson, 2011). The next stage is the proliferative phase, which occurs between days 5 and 20, followed by the maturation phase, which begins on day 21 and can continue for up to a month or longer, depending on the wound condition and the individual. In practice, perineal wound healing in postpartum mothers varies; some experience healing within the normal range of 6–7 days, while others take longer than 7 days to heal. The rate of wound healing is influenced by several internal factors, including age, tissue condition, hemorrhagic status, hypovolemia, local edema, nutritional status, personal hygiene, oxygenation levels, and physical activity. External factors also play a role, such as environment, cultural traditions, knowledge level, socioeconomic status, and the quality of care and education provided by healthcare workers. Considering the many factors that influence perineal wound healing, comprehensive care efforts are necessary—including the use of non-pharmacological therapies such as turmeric and tamarind, which have the potential to accelerate the healing process (Salama, 2023).

The findings revealed that most of the respondents were working individuals based on their occupational background, totaling 10 individuals (62.5%), while 6 respondents (37.5%) were unemployed. A mother's employment status may affect the level of fatigue experienced during the postpartum period, which can indirectly influence the perineal wound healing process. In terms of parity, the majority of respondents were primiparous, totaling 9 individuals (56.25%), while 7 (43.75%) were multiparous. Primiparous mothers typically lack experience in childbirth and postpartum recovery, making it more challenging for them to anticipate and manage their physical condition, including perineal wound care. In contrast, multiparous mothers benefit from prior childbirth experience, which can help them be more prepared to face the postpartum period and care for their wounds more effectively.

Perineal wound healing occurs in three distinct phases: the inflammatory phase (days 1 to 4), the proliferative phase (days 5 to 20), and the maturation phase (beginning on day 21 and potentially continuing for a month or longer). During the inflammatory phase, blood elements—including antibodies, plasma proteins, electrolytes, complement, and water—migrate into the tissue surrounding the wound over a period of 2–3 days. This response results in common clinical signs such as edema, warmth, redness, and pain (Nurseha et al., 2024). In reality, perineal wound healing in postpartum mothers varies, with most experiencing normal healing within 6–7 days, while others take longer than 7 days. The speed of healing is influenced by various factors. Internal factors include age, tissue condition, hemorrhagic status, hypovolemia, local edema, nutritional status, personal hygiene, oxygen levels, and physical activity. External factors include environmental conditions, cultural traditions, knowledge levels, socioeconomic status, and the quality of education provided by healthcare workers. Therefore, special attention to perineal wound care is essential, including non-pharmacological approaches such as

the use of turmeric and tamarind, which are known to have the potential to accelerate the healing process.

Respondents in the control group had REEDA scores ranging from 3 to 5, with a total of 8 individuals, indicating that the perineal wound healing process occurred more slowly compared to the experimental group. This finding suggests that the absence of additional treatment, such as turmeric and tamarind, may delay the recovery of perineal wounds. These results are consistent with the study by Susanti, D. (2018), which found that the average perineal wound healing score in the control group at Ngesrep and Sronjol Community Health Centers in Semarang City was 8.42, with a standard deviation of 1.74. Similarly, a study by Andanawarih and Ulya (2021) in Pekalongan City showed that the control group recorded a mean rank of 23.00 with a standard deviation of 345.00. Both studies support the findings of this research, indicating that without additional interventions, the perineal wound healing process tends to take longer.

Perineal Wound Healing Among Postpartum Mothers in the Experimental Group During Days 1–7

The data analysis showed that in the experimental group, nearly all respondents (93.75%) had REEDA scores ranging from 0 to 2, while a small portion (6.25%) fell within the 3–5 range. These findings indicate that the majority of postpartum mothers in the experimental group experienced good perineal wound healing. This effectiveness is believed to be related to the active compounds found in turmeric and tamarind. Turmeric (*Curcuma domestica Val.*) contains active substances such as curcumin, which functions as an analgesic, antipyretic, and anti-inflammatory agent. Meanwhile, tamarind (*Tamarindus indica L.*) contains active compounds such as tannins, saponins, sesquiterpenes, alkaloids, and phlobatannins, which have laxative properties, helping to ease bowel movements and reduce pressure on the perineal area (Benzie & Wachtel-Galor, 2011). The combination of these two ingredients is believed to support the wound healing process more effectively by reducing inflammation and accelerating tissue regeneration.

This study said that the postpartum mothers with perineal wounds received a turmeric-tamarind beverage as part of the intervention. The drink was consumed every morning for seven consecutive days, starting from the first day of the postpartum period. The preparation of the turmeric and tamarind drink involved mixing turmeric powder and tamarind powder in the appropriate proportions, adding 150 ml of warm water, and stirring until fully dissolved before consumption. The effectiveness of the intervention was evaluated on the 7th day postpartum using the REEDA scale to assess the level of perineal wound healing.

The benefits of turmeric and tamarind in accelerating wound healing have been supported by various theories and previous studies. Turmeric (*Curcuma domestica Val*) is known to contain the active compound curcumin, which plays a significant role in promoting re-epithelialization, cell proliferation, and collagen synthesis—all of which contribute substantially to the wound healing process (Wientarsih et al., 2013). Meanwhile, tamarind possesses antibacterial, anti-inflammatory, analgesic, and antioxidant properties. Traditionally, it has been used to treat various ailments such as fever, rheumatism, coughs, eczema, and external wounds. Beyond these traditional uses, tamarind has also demonstrated effectiveness in accelerating the healing of open wounds by enhancing wound contraction and facilitating the migration of epithelial cells around the wound site (Kurniati & Azizah, 2021; Fadhillah & Futriani, 2025).

Based on the respondents' characteristics in this study, the majority were aged between 20–35 years, totaling 13 individuals (81.25%). Age serves as an internal factor that impacts how quickly perineal wounds heal, since variations in physiological development among different age groups can influence the body's healing response (Triyani et al., 2021). In terms of education, most respondents had completed senior high school, totaling 9 individuals (56.25%). Education level is correlated with health-related behavior, including an individual's ability to understand and respond to their health condition, as well as to carry out self-care efforts (Rachmawati, 2019).

In terms of occupation, the distribution of respondents was relatively balanced, with 8 individuals employed (50%) and 8 unemployed (50%). Work-related activity may affect physical fatigue, which has the potential to slow down the wound healing process. Based on parity, the majority of respondents were multiparous (62.5%), while primiparous mothers accounted for 37.5%. Multiparous mothers tend to have experience in dealing with childbirth and the postpartum period, including perineal wound care. In contrast, primiparous mothers often face challenges due to a lack of experience, which may affect the speed of wound healing.

The Mann-Whitney statistical test showed that the experimental group, which received

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turmeric and tamarind drinks, had lower REEDA scores, with the majority of respondents (93.75%) scoring between 0 and 2. This indicates that perineal wound healing occurred more quickly in the experimental group compared to the control group. These findings are supported by a study by Susanti (2018), which found that the average perineal wound healing score in the experimental group at Ngesrep and Sronjol Community Health Centers in Semarang City was 6.21, with a standard deviation of 1.12. Another study by Andanawarih and Ulya (2021) in Pekalongan City reported similar results, with a mean rank of 8.00 and a standard deviation of 120.00 in the experimental group. Both studies support the conclusion that non-pharmacological interventions, such as turmeric and tamarind, can significantly accelerate the perineal wound healing process.

The Impact of Turmeric-Tamarind Consumption on Perineal Wound Healing in Postpartum Mothers During Days 1–7

Based on the test, the Asymp. Sig. (2-tailed) value was 0.000. Since this p-value is less than the significance threshold of 0.05 (0.000 < 0.05), concluded that there is a statistically significant difference between the experimental and control groups. Accordingly, H_0 is rejected and the H_a is accepted, indicating that the consumption of turmeric and tamarind has a significant effect on perineal wound healing in postpartum mothers from day 1 to day 7.

The use of turmeric and tamarind as a traditional postpartum drink is widely recognized, particularly in the Java region. The active compounds in turmeric have been scientifically proven to offer significant benefits for wound care and skin health. Previous research has shown that the process of cell regeneration, including re-epithelialization and the formation of new tissue, occurs 5–10 days faster in individuals who consume turmeric and tamarind compared to those who do not (Wathoni, 2016)). Curcumin, the main component of turmeric, is known to have anti-inflammatory, antioxidant, anticarcinogenic, antimutagenic, anticoagulant, and antimicrobial properties that comprehensively support the wound healing process.

In addition, nutritional intake is also an important factor in the wound healing process. Postpartum mothers with adequate protein intake tend to experience faster healing compared to those with protein deficiency, as a lack of protein can impair the body's tolerance to food and hinder the metabolic processes necessary for tissue regeneration. Other factors that influence perineal wound healing include maternal characteristics, the type of wound, early mobilization, wound care practices, and personal hygiene (Kurnaz et al., 2025).

The findings of this study are consistent with those of Susanti (2018), who stated that the consumption of turmeric and tamarind is effective in accelerating perineal wound healing. Similarly, the study by Andanawarih and Ulya (2021) showed a significant difference between the intervention and control groups, with a p-value < 0.05, confirming that the consumption of turmeric and tamarind accelerates the wound recovery process in postpartum mothers.

Thus, it can be concluded that turmeric and tamarind drink therapy has a positive effect on the perineal wound healing process in postpartum mothers. During the implementation of the study, no significant obstacles were encountered, as the respondents felt comfortable with the treatment provided. Therefore, turmeric and tamarind can be considered a safe and effective non-pharmacological therapy alternative to support postpartum recovery.

CONCLUSION

A study conducted on 32 respondents at PMB Bdn. Retnoningsih, S.Tr.Keb in Pagelaran and PMB Bdn. Hj. Ririn Restatiningrum, S.ST., M.AP in Bululawang, Malang Regency, demonstrated that the consumption of turmeric and tamarind had a statistically significant impact on the healing of second-degree perineal wounds in postpartum mothers from day 1 to day 7. In the experimental group, which received turmeric-tamarind treatment, 15 respondents showed lower REEDA scores (0–2), indicating more favorable wound healing outcomes. In contrast, 8 respondents in the control group exhibited higher REEDA scores (3–5). The Mann-Whitney test yielded a p-value of 0.000 (p < 0.05), confirming a significant difference between the experimental and control groups.

SUGGESTION

The results of this study are expected to enhance respondents' knowledge about the benefits of turmeric tamarind in accelerating perineal wound healing after childbirth. Future researchers are encouraged to expand the literature related to this topic to support more in-depth studies. Institutions are expected to serve as sources of information and education regarding the use of turmeric tamarind for postpartum mothers. Additionally, healthcare providers can use these findings as a reference in

delivering care and education to postpartum mothers on natural perineal wound treatment.

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