

THE EFFECT OF HONEY APPLICATION ON PERINEAL WOUND HEALING AMONG POSTPARTUM WOMEN IN THE WORKING AREA OF PEKURUN COMMUNITY HEALTH CENTER, NORTH LAMPUNG REGENCY

Erma Yusmaniar¹, Anggraini², Fijri Rachmawati³, Ana Mariza⁴

^{1,2,3} Faculty of Health Sciences, Malahayati University, Bandar Lampung
Email correspondence : ermayusmaniar738@gmail.com

ABSTRAK : PENGARUH PEMBERIAN MADU TERHADAP PENYEMBUHAN LUKA PERINIUM PADA IBU NIFAS DI WILAYAH KERJA PUSKESMAS PEKURUN KABUPATEN LAMPUNG UTARA

Latar Belakang: Robekan perineum setelah melahirkan adalah hal yang umum dan dapat menyebabkan nyeri, dispareunia, trauma psikologis, dan risiko inkontinensia, yang semuanya berdampak pada kualitas hidup ibu. Sekitar 85% wanita yang melahirkan secara vaginal mengalami trauma perineum, dengan 32–33% disebabkan oleh episiotomi dan 52% disebabkan oleh laserasi spontan. WHO melaporkan bahwa hampir 90% persalinan normal mengalami robekan perineum. Madu adalah salah satu alternatif alami yang dikenal dapat mempercepat regenerasi jaringan dan telah terbukti unggul dalam penyembuhan luka. Penelitian ini bertujuan untuk mengetahui pengaruh aplikasi madu terhadap penyembuhan luka perineum pada ibu pasca melahirkan di wilayah kerja Puskesmas Pekurun, Kabupaten Lampung Utara.

Metode: Penelitian kuantitatif ini menggunakan desain kuasi-eksperimental dengan pendekatan pretest-posttest dua kelompok. Populasi terdiri dari 46 ibu pasca melahirkan di wilayah kerja Puskesmas Pekurun, dan sebanyak 30 responden dipilih sebagai sampel menggunakan purposive sampling. Mereka dibagi menjadi dua kelompok: 15 orang dalam kelompok intervensi dan 15 orang dalam kelompok kontrol. Data dikumpulkan melalui lembar observasi dan dianalisis menggunakan analisis univariat dan bivariat (uji t sampel berpasangan).

Hasil: Hasil penelitian menunjukkan bahwa pada kelompok intervensi, rata-rata skor penyembuhan luka perineum pada hari ke-1 adalah 10,60 dan menurun menjadi 0,53 pada hari ke-7, sedangkan pada kelompok kontrol, rata-rata skor pada hari ke-1 adalah 10,67 dan menurun menjadi 1,60 pada hari ke-7. Terdapat pengaruh signifikan aplikasi madu terhadap penyembuhan luka perineum pada ibu pascapersalinan di wilayah kerja Puskesmas Pekurun, Kabupaten Lampung Utara (nilai $p = 0,000$). Dianjurkan agar ibu pascapersalinan menggunakan madu sebagai salah satu pengobatan komplementer untuk luka perineum dengan mengoleskan 5 ml madu dua kali sehari.

Kata kunci: Ibu pascapersalinan, luka perineum, aplikasi madu

ABSTRACT

Background: Perineal tears after childbirth are common and can cause pain, dyspareunia, psychological trauma, and a risk of incontinence, all of which impact the mother's quality of life. Approximately 85% of women who give birth vaginally experience perineal trauma, with 32–33% due to episiotomy and 52% due to spontaneous lacerations. WHO reports that nearly 90% of normal deliveries experience perineal tears. Honey is one of the natural alternatives known to accelerate tissue regeneration and has proven superior in wound healing. This study aims to determine the effect of honey application on perineal wound healing among postpartum women in the working area of Pekurun Community Health Center, North Lampung Regency.

Methods: This quantitative study employed a quasi-experimental design with a two-group pretest-posttest approach. The population consisted of 46 postpartum mothers in the working area of Pekurun Community Health Center, and a total of 30 respondents were selected as samples using purposive sampling. They were divided into two groups: 15 in the intervention group and 15 in the control group. Data were collected through observation sheets and analyzed using univariate and bivariate analysis (paired sample t-test).

Results: The research results showed that in the intervention group, the mean perineal wound healing score on day 1 was 10.60 and decreased to 0.53 on day 7, while in the control group, the mean score on day 1 was 10.67 and decreased to 1.60 on day 7. There was a significant effect of honey application on perineal wound healing among postpartum women in the working area of Pekurun Community Health Center, North Lampung

Regency (p -value = 0.000). It is recommended that postpartum mothers use honey as one of the complementary treatments for perineal wounds by applying 5 ml of honey twice daily.

Keywords: Postpartum mother, perineal wound, honey application

INTRODUCTION

The postpartum period lasts approximately six weeks, during which the reproductive organs recover (Herselowati, 2024). One of the common problems that occurs during this period is a perineal wound or rupture, caused by either an episiotomy or spontaneous laceration, in both first-time and subsequent deliveries (Fatimah, 2019). Approximately 85% of women who give birth vaginally experience perineal trauma of varying degrees. In England, only 8.6% of nulliparous women and 28.5% of multiparous women have an intact perineum. The rate of episiotomy varies worldwide, such as 91% in Thailand (Schaap, 2025). Around 85% of spontaneous vaginal births involve perineal trauma—32–33% due to episiotomy and 52% due to spontaneous laceration (Sari et al., 2020). WHO reports that nearly 90% of normal deliveries experience perineal tears, and 50% of perineal rupture cases worldwide occur in Asia. In Indonesia, the prevalence is 24% among mothers aged 25–30 years and 62% among those aged 31–39 years (Siti, 2023). In Lampung, out of 81 delivering mothers, 68 underwent episiotomy and 13 experienced perineal rupture (Betalia, 2022). At one midwifery clinic in South Lampung, 80% of mothers experienced perineal rupture (Mutmainah, Yuliasari & Mariza, 2019).

Perineal wounds may cause postpartum hemorrhage, which accounts for 40% of maternal deaths in Indonesia (Sari et al., 2020). According to data from the Lampung Provincial Health Office (2023), hemorrhage was the leading cause of maternal death with 24 cases, followed by hypertension (25 cases) and infection (1 case). Perineal wounds also carry the risk of urinary tract and birth canal infections (Nia et al., 2024). In addition to medical complications, such wounds can cause pain, dyspareunia, psychological trauma, urinary and fecal incontinence, and decreased quality of life for mothers (Mutia et al., 2021). The healing process usually takes 7–10 days and not more than 14 days, influenced by factors such as tissue perfusion, oxygenation, stress, sleep, nutrition, infection, and lifestyle (Fatimah, 2019; Perry & Potter, 2018; Maryunani, 2020; Rukiyah, 2019).

Wound care can be done pharmacologically using povidone-iodine or non-pharmacologically with natural ingredients such as red betel leaves,

aloe vera, turmeric, binahong, guava, and pineapple juice (Hamzah et al., 2021). One of the most widely studied natural alternatives is honey because of its antibacterial, anti-inflammatory properties, and its ability to accelerate tissue regeneration (Wulandari & Astuti, 2017). Honey contains glucose oxidase enzymes, antioxidants, vitamins, minerals, and simple sugars that provide energy for cells. Additionally, honey promotes fibroblast activity and angiogenesis, accelerating the healing process (Schaap, 2025). The application procedure involves spreading 5 ml of honey using sterile gauze twice daily for 7–10 days (Lestari, 2018).

Lestari's study (2018) found that 60% of respondents experienced faster healing with honey, while Wulandari & Astuti (2017) demonstrated that honey was more effective than povidone-iodine ($p < 0.05$). A preliminary study at Pekurun Community Health Center (October–December 2024) found that 83.4% of mothers experienced perineal rupture. Out of 10 postpartum women, one had not recovered by the 14th day due to dietary restrictions and lack of mobility. Routine treatment consisted only of ointment, with average improvement seen between days 8–12, and honey had never been used.

Based on these findings, this study was conducted under the title "The Effect of Honey Application on Perineal Wound Healing among Postpartum Women in the Working Area of Pekurun Community Health Center, North Lampung Regency." The research question is: "Is there an effect of honey application on perineal wound healing among postpartum women in the working area of Pekurun Community Health Center, North Lampung Regency?"

RESEARCH METHODS

This study used a quantitative method based on positivism to test hypotheses through research instruments (Sugiyono, 2018). The research was conducted in the working area of Pekurun Community Health Center, North Lampung Regency, from May to July 2025, using a **quasi-experimental design** with a *two-group posttest-only design*. This design compared an experimental group (which received honey application on perineal wounds) with a control group that did not receive the intervention (Riyanto, 2017). The population consisted of all postpartum mothers in the area (46 women), while the sample included 30 respondents

selected through **purposive sampling**, divided into 15 respondents in the intervention group and 15 in the control group (Sugiyono, 2018). The **inclusion criteria** were postpartum mothers with first- or second-degree perineal lacerations who were willing to participate, while the **exclusion criteria** were mothers with certain diseases, those using other herbal treatments, or those who underwent episiotomy (Sulung, 2022).

The independent variable in this study was the application of pure black honey (5 ml applied to sterile gauze, twice daily for six days), while the dependent variable was perineal wound healing, measured using the REEDA scale (Redness, Edema, Ecchymosis, Discharge, and Approximation) (Alvarenga, 2015). The research procedure included preparation and obtaining informed consent, assessment of wound condition (pretest),

honey intervention for the experimental group, and reassessment of the wound after six days (posttest).

Data were collected using observation sheets and then processed through the stages of editing, processing, and cleaning (Notoatmodjo, 2018). The analysis was conducted univariately to describe the characteristics of respondents and wound conditions, and bivariately to test differences between the two groups using the *t-test* for normally distributed data or the *Wilcoxon test* for non-normally distributed data (Hastono, 2021).

RESEARCH RESULTS

Respondents' Characteristics

Based on Table 1, all respondents in both the intervention and control groups were in the 20–35 years age range, with 15 respondents (100%) in each group. There were no respondents aged over 35 years in either group.

1

Characteristics of Respondents

Variable	Category	Intervention		Control	
		N	%	n	%
Age	20 – 35 tahun	15	100%	15	100%
	>35 tahun	0	0%	0	0%

Univariate Analysis

Table 2

Average Perineal Wound Healing Among Postpartum Women Given Honey (Intervention Group) in the Working Area of Pekurun Community Health Center, North Lampung Regency

Healing of Perineal Wound	Mean	SD	Min	Max	N
Day 1	10,60	0,98	9	12	15
Day 2	0,53	0,64	0	2	15

Based on Table 2, the mean perineal wound healing score on day 1 was 10.60 with a standard deviation of 0.98, minimum value 9, and maximum

value 12. On day 7, the mean wound healing score decreased to 0.53, with a standard deviation of 0.64, minimum 0, and maximum 2.

Table 3

Average Perineal Wound Healing Among Postpartum Women Without Honey Application (Control Group) in the Working Area of Pekurun Community Health Center, North Lampung Regency

Healing of Perineal Wound	Mean	SD	Min	Max	n
Day 1	10,67	1,04	9	12	15
Day 7	1,60	0,63	1	3	15

Based on Table 3, the mean perineal wound healing score on day 1 in the control group was 10.67 with a standard deviation of 1.04, minimum 9, and maximum 12. On day 7, the mean score

decreased to 1.60, with a standard deviation of 0.63, minimum 1, and maximum 3

Normality Test

Based on Table 4, the normality test using the Shapiro–Wilk method showed significance

values greater than 0.05 for both the intervention and control groups, indicating that the data were

normally distributed. Therefore, bivariate testing was continued using the paired sample t-test.

Table 4
Normality Test Results

Perineal Wound Healing	Honey	Shapiro Wilk	Description
Intervention	Day 1	0,082	Normal
	Day 7	0,056	Normal
Control	Day 1	0,052	Normal
	Day 7	0,051	Normal
Difference	Day 1-7	0,026	
	Day 1-7	0,001	

Bivariate Test

Table 5
Effect of Honey Application on Perineal Wound Healing Among Postpartum Women in the Working Area of Pekurun Community Health Center, North Lampung Regency

Perineal Wound Healing	Honey	Mean	Beda Mean	P- Value
Intervention	Day 1	10,60	10,00	0,000
	Day 7	0,53		
Control	Day 1	0,53	9,06	0,000
	Day 7	1,60		
Group Difference			0,94	0,000

Based on Table 5, the results of the paired sample t-test showed a p-value = 0.000 ($p < 0.05$), indicating a significant effect of honey application on perineal wound healing among postpartum women in the working area of Pekurun Community Health Center, North Lampung Regency. The intervention group showed an improvement in wound healing with a mean difference of 0.94.

DISCUSSION

Univariat Analysis

In the intervention group, the average perineal wound healing score decreased from 10.60 on the first day to 0.53 on the seventh day, indicating a significant improvement. This result aligns with the study by Asniah (2022), which reported a reduction in wound scores from 15.20 to a good category by the seventh day, as well as Wulandari (2017), who found that 96.55% of respondents in the honey-treated group experienced good healing outcomes. The effectiveness of honey is associated with its antibacterial and anti-inflammatory properties, and its content of enzymes, flavonoids, and phenolic acids, which accelerate tissue regeneration (Wulandari & Astuti, 2017; Hamzah et al., 2021).

In the control group, the wound healing score decreased from 10.67 to 1.60 on the seventh day,

indicating slower progress compared to the intervention group. This finding is consistent with Sumiasih (2016) and Fatimah (2021), who reported that perineal wound healing typically occurs within 6–8 days. Delayed healing can be influenced by pain, dietary restrictions, and poor perineal hygiene. These results are in line with previous literature stating that wound healing is influenced by tissue perfusion, nutrition, oxygenation, infection, and lifestyle (Fatimah, 2019; Perry & Potter, 2018; Maryunani, 2020; Rukiyah, 2019).

Bivariate Analysis

The paired sample t-test results showed a p-value = 0.000 (< 0.005), indicating a significant effect of honey application on perineal wound healing. This finding supports the studies of Asniah (2022), Yeni (2023), and Wulandari (2017), all of which demonstrated that honey effectively accelerates wound healing ($p < 0.005$). The bioactive components of honey promote healing through anti-inflammatory effects, stimulation of fibroblast activity, and angiogenesis (Schaap, 2025).

Although most respondents in the intervention group showed significant improvement, a few had lower healing scores, possibly due to local factors (such as mild infection or improper application techniques) and systemic factors (such

as poor nutrition, anemia, limited mobility, or dietary restrictions). Thus, this study confirms that honey is effective in accelerating perineal wound healing, although its success also depends on the individual condition of postpartum mothers.

CONCLUSION

The results of the study showed that most respondents in the intervention group were over 25 years old, totaling 14 people (93.3%), while in the control group there were 12 people (80.0%). The average perineal wound healing score in the intervention group on the first day was 10.60, which decreased to 0.53 on the seventh day, with a standard deviation of 0.64, a minimum value of 0, and a maximum value of 2. Meanwhile, in the control group, the average perineal wound healing score on the first day was 10.67, decreasing to 1.60 on the seventh day, with a standard deviation of 0.63, a minimum value of 1, and a maximum value of 3. Thus, there was a significant effect of honey application on perineal wound healing among postpartum women in the working area of Pekurun Community Health Center, North Lampung Regency, with a p-value = 0.000.

SUGGESTION

For postpartum mothers, applying 5 ml of honey twice daily directly to the perineal wound using sterile gauze can serve as a safe, natural, and home-based treatment method that effectively accelerates the healing process. Consistent care over 7 to 10 days is expected to promote faster recovery, allowing mothers to resume daily activities, care for their babies, and breastfeed more comfortably. For the Pekurun Community Health Center, health workers are encouraged to provide education and guidance to postpartum mothers regarding the proper application of honey, including dosage and frequency, as part of health promotion efforts. Furthermore, information about the benefits of honey can be disseminated through educational media such as leaflets, booklets, social media, or educational videos to encourage broader community application. For Malahayati University, the results of this study contribute to the development of scientific knowledge and can serve as additional information and input for the implementation of complementary therapy using honey in perineal wound healing among postpartum mothers. Meanwhile, for future researchers, it is recommended to conduct more comprehensive direct observations or use more objective assessment instruments to minimize differences in perception between researchers and enumerators.

Future studies are also advised to consider additional variables, such as Kegel exercises, nutritional status, or a qualitative approach to explore postpartum mothers' perceptions regarding the use of honey in perineal wound healing.

REFERENCES

- Afriani, A. I., & Pangesti, G. M. Y. (2023). Effectiveness Of Honey And Black Cumin Oil In Healing Of Perineal Wounds In Postpartum Women. *Jurnal Kebidanan*, XV(02), 192–203.
- Ahmed, S., Sulaiman, S. A., Baig, A. A., Ibrahim, M., Liaqat, S., Fatima, S., Jabeen, S., Shamim, N., & Othman, N. H. (2018). Honey as a Potential Natural Antioxidant Medicine: An Insight into Its Molecular Mechanisms of Action. *Oxidative Medicine and Cellular Longevity*, 2018. <https://doi.org/10.1155/2018/8367846>
- Alvarenga, M. B., Francisco, A. A., De Oliveira, S. M. J. V., Da Silva, F. M. B., Shimoda, G. T., & Damiani, L. P. (2015). Episiotomy healing assessment: Redness, oedema, ecchymosis, discharge, approximation (REEDA) scale reliability. *Revista Latino-Americana de Enfermagem*, 23(1), 162–168. <https://doi.org/10.1590/0104-1169.3633.2538>
- Andanawarih, P., & Ulya, N. M. (2021). *Monograf Khasiat Jamu Kunyit Asam bagi Ibu Nifas*. Penerbit Nem..
- Andriani, Y. (2023). *The Effect Of Honey On Wound Healing Postthe Effect Of Honey On Wound Healing Post Sectio Caesarea At Marine Hospital Cilandak Jakarta Yeni Andriani, Retno Widowati, Lisa Trina Arlym*.
- Astutik. (2015). *Asuhan Kebidanan Masa Nifas Dan Menyusui*. Jakarta :Trans Infomedia.
- Azzahra, G. P. (2020). *Perbedaan Lama Penyembuhan Luka Perineum Pada Ibu Nifas Menggunakan Minyak Zaitun dan Madu Di PMB Kiswari Kota Metro*. 2017(1), 1–9. <http://190.119.145.154/handle/20.500.12773/11756>
- Baumann, S., Staudt, A., Horesh, D., Eberhard-Gran, M., Garthus-Niegel, S., & Horsch, A. (2024). Perineal tear and childbirth-related posttraumatic stress: a prospective cohort study. *Acta Psychiatrica Scandinavica*, 150(5), 446-457.
- Betalia, B. (2024). Analisis Faktor Resiko Ruptur Perineum Pada Persalinan Pervaginam Di Rsia Bunda Liwa Kabupaten Lampung Barat Tahun 2022. *Jurnal Maternitas Aisyah*

- (*Jaman Aisyah*), 5(2), 123-131.
- Fatimah. (2019). *Pijat Perineum* (Tim Pustaka Baru (ed.)). Tim Pustaka Baru.
- Gunawan, N. A. (2017). Madu : Efektivitasnya untuk Perawatan Luka. *lai*, 44(2), 138–142.
- Hartina, A. (2022). *Pemberian Gel Madu Trigona Untuk Penyembuhan Luka Perineum Pada Ibu Post Partum Grade 1 Dan Grade II*. 9, 356–363.
- Hastono. (2021). *Analisa Data Pada Bidang Kesehatan*. Pt. Raja Grafindo Perkasa.
- Hendarto, D. (2019). *Khasiat Jitu Daun Kelor dan Sirih Merah Tumpas Penyakit*. Laksana.
- Herselowati, H. (2024). Buku Ajar asuhan kebidanan kegawatdaruratan maternal dan neonatal.
- Jamila, F., & Anwar, Y. Y. (2017). Pengaruh Pemberian Jus Nanas Dan Madu Terhadap Penyembuhan Luka Perineum Pada Ibu Post Partum Di Bpm Ny.Arifin S, SST Surabaya. *Repository Stikes Surabaya*, 7, 5–12.
- Lestari, S. (2018). *Penerapan Pemberian Madu untuk Mempercepat Penyembuhan Luka Perineum pada Ibu Post Partum di PMB Ida Ayu A, S. ST Kebumen* (Doctoral dissertation, STIKES MUHAMMADIYAH GOMBONG).
- Maryunani, A. (2015). *Perawatan Luka Seksio Caesarea (SC) dan Luka Kebidanan Terkini (Dengan Penekanan Moist Wound Healing)* (IKAPI (ed.)). In Media.
- Meidiana, V. V. (2023). *Analisis Asuhan Keperawatan Ulkus Diabetikum Pada Ny. a Dengan Perawatan Luka Menggunakan Madu Terhadap Proses* <http://repository.lp4mstikeskhg.org/id/eprint/170>
- Monica, O. T., Fatmasari, D., Suwondo, A., & Rumah, P. P. (2022). *Spray Lidah Buaya (Aloe Vera) untuk Menurunkan Tingkat Nyeri dan Mempercepat Penyembuhan Luka Perineum Ibu Nifas*. Penerbit Pustaka Rumah C1nta.
- Mutia, W. O. N., Usman, A. N., Jaqin, N., Prihantono, Rahman, L., & Ahmad, M. (2021). Potency of complemeter therapy to the healing process of perineal wound; turmeric (*Curcuma longa* Linn) Infusa. *Gaceta Sanitaria*, 35, S322–S326. <https://doi.org/10.1016/j.gaceta.2021.10.045>
- Notoatmodjo. (2018). *Metodologi penelitian kesehatan (Cetakan VI)*. (PT. Rineka Cipta (ed.)). PT. Rineka cipta.
- Prawiroharjo. (2016). *Ilmu Kebidanan*. (Bina Pustaka (ed.)). Bina Pustaka.
- Rao V.P, P., Thevan, K., Salleh, N., & Hua, S. (2016). Biological and therapeutic effects of honey produced by honey bees and stingless bees : a comparative review. *Revista Brasileira de Farmacognosia*, 26(5), 657–664. <https://doi.org/10.1016/j.bjp.2016.01.012>
- Riyanto. (2019). *Aplikasi Metodologi Penelitian Kesehatan* (Nuha Medika (ed.)). Nuha Medika.
- Saputro, H. (2022). *Pelepasan Alat Sunat Superring dengan Pemberian Aloe Vera Gel dan Berendam Air Hangat* (Vol. 4, Issue 1). [http://repository.iik-strada.ac.id/125/3/Monograf Superring.pdf](http://repository.iik-strada.ac.id/125/3/Monograf%20Superring.pdf)
- Santika, V. W., Lathifah, N. S., & Parina, F. (2020). Pengaruh Pemberian Telur Rebus Dengan Percepatan Penyembuhan Luka Perineum. *Jurnal Kebidanan Malahayati*, 6(2), 244-248.
- Sari, S. M., Anggraini, A., & Putri, R. D. (2020). Ekstrak ikan gabus terhadap luka perineum. *Jurnal Medika Malahayati*, 4(4), 305-311.
- Savita, R., Heryani, H., Jayanti, C., Suciana, S., Mursiti, T., & Fatmawati, D. N. (2022). Buku Ajar Nifas DIII Kebidanan Jilid II.
- Schaap, I. S., Lardenoije, C. M. J. G., Riel, S. J. J. M. Van, & Cremers, N. A. J. (2025). *The Efficacy of Honey for the Treatment of Perineal Wounds Following Vaginal Birth : A Narrative Review*. 1–18.
- Setyawan andri, W. (2012). *PENGARUH KONSENTRASI MADUHUTAN SUMBAWAPADA SALEP BERBASIS POLIETILEN GLIKOLDENGAN MENGAJI SIFAT FISIK DAN AKTIVITAS ANTIBAKTERI TERHADAP Staphylococcus aureus*. April.
- Sofyanita, E. N., & Iswara, A. (2023). *Stimulasi angiogenesis pada penyembuhan luka akut terinfeksi bakteri dengan perlakuan pemberian madu pada mencit balb/c*. Penerbit Nem.
- Sugiyono. (2019). *Metode Penelitian (Pendekatan Kuantitatif, Kualitatif, dan R & D)*. CV. Alfabeta.
- Sukmawati, Mamuroh, L., Nurhakim, F., & Hermayanti, Y. (2020). Penatalaksanaan Non Farmakologi Luka Perineum pada Ibu Post Partum. *Journal of Maternity Care and Reproductive Health*, 4(4).
- Siti, I., Rachmawati, A., & Kusumawati, E. (2023). Pengaruh derajat laserasi perineum terhadap skala nyeri perineum pada ibu post partum.

- Sulung, N. (2022). *Metode Besar Sampel Dan Teknik Pengambilan Sampling Untuk Penelitian Kesehatan*. CV Budi Utama.
- Wulandari, D., & Astuti, W. D. (2017). Perbandingan Penyembuhan Luka Perineum Pada Ibu Postpartum Dengan Madu Vs Povidon Iodin Di Rb Amanda Yogyakarta. *HSG Journal*, 1(2), 122-138.
- Walyani. (2017). *Asuhan Kebidanan Nifas dan*

- Menyusui* (Pustakabarupress (ed.)). Pustakabarupress.
- Zeranika, N., Suprihatin, S., & Indrayani, T. (2022). Efektivitas Air Rebusan Daun Binahong terhadap penyembuhan Luka Perineum pada Ibu Nifas di Klinik MMC Kabupaten Tulang Bawang Lampung. *Journal for Quality in Women's Health*, 5(1), 120–128. <https://doi.org/10.30994/jqwh.v5i1.143>