## **International Journal of Public Health Excellence (IJPHE)**

Vol. 3, No. 1, December 2023, pp. 460~470

Journal Homepage: https://ejournal.ipinternasional.com/index.php/ijphe

ISSN: 2809-9826, DOI: 10.55299/ jphe.v3i1.744

# The Relationship between Knowledge and Attitudes of Postpartum Mothers regarding Vulva Hygiene and Prevention of Perineal Wound Infections at the Sulastri Clinic

# Lili Nurmaliza<sup>1</sup> Rhina Chairani Lubis<sup>2</sup> Muryani<sup>3</sup>

<sup>1,2</sup> Prodi D3 Kebidanan, Sekolah Tinggi Ilmu Kesehatan Indah, Indonesia <sup>3</sup> Institut Kesehatan Sumatera Utara

#### **Article Info**

#### Article history:

Received November 13, 2023 Revised November 24, 2023 Accepted December 14, 2023

#### Corresponding Author:

Lili Nurmaliza

Prodi D3 Kebidanan, Sekolah Tinggi Ilmu Kesehatan Indah, Indonesia Email:

lilinurmaliza105@gmail.com

## ABSTRACT

Perineal tearing that occurs when mothers are in the postpartum phase during the birthing process increases every year and wound healing also takes a long time. This of course occurs due to several factors, one of which is vulva hygiene. According to a survey at the Sulastri Clinic in 2023, out of 10 postpartum mothers, around 7 patients had injuries lasting more than 7 days. This is because mothers who are in the postpartum phase do not practice good vulva hygiene because they are afraid of touching the stitched wound and are also afraid of experiencing a long recovery. The research method used was quantitative and cohort methods. The population of postpartum mothers at the Sulastri Clinic in 2023 will be around 35 postpartum mothers. The sampling method prioritizes the concept of Consecutive Sampling. Then for the independent variable vulva hygiene and also the dependent variable or bound to the speed of healing of perineal wounds in postpartum mothers. Research data was obtained using questionnaires and also observation. The data was tabulated and also analyzed using Fisher's Exact Test. The results of the study show that p = 0.000,  $\alpha$  = 0.05 p <  $\alpha$  where H1 will be accepted due to the correlation between vulva hygiene and rapid healing of perineal wounds in postpartum mothers. It is hoped that this research can increase the role of health workers in healing perineal wounds in postpartum mothers.

**Keywords:** Postpartum mothers, perineal wounds, vulva hygiene

This article is licensed under a <u>Creative Commons Attribution 4.0</u> International License .



## 1. INTRODUCTION

The puerperium, or postpartum period, is understood as a period after the placenta until tool reproduction from the pregnant mother recovers and can also work normally. Postpartum period: This usually takes place for 6 weeks or 40 days. And during the puerperium period, tool reproduction Of course, you just must treat yourself well and be clean so you can become a method to prevent infection when entering the postpartum period after pregnancy.

Wounds in the perineum that appear from episiotomy, rupture, and/or laceration are areas that aren't easy to guard. Good for still dry and also clean. Maintenance perineal wounds that occur in the mother postpartum Alone more focus to method reduce discomfort and also maintain cleanliness as well as prevent infection. Besides that, it can increase the healing of perineal wounds from mother postpartum.

Maintenance of perineal wounds can be done with clean running water and can also be added with antiseptic medication 2–3 times a day. Usually done when bathing and also when urinating and defecating. All aspects of postpartum maintenance are normally held with effort as a method of maintaining hygiene or cleanliness and also as a comfort measure to prevent infection in the tissue tool reproduction.

According to data from the WHO in 2017, there are around 2.9 million cases of perineal tears that occur when a mother is currently in labor. This figure is predicted. Can reach around 6.8 million in 2050 if workers health counseling about good midwifery methods. Prevalence Mother Maternity who gets the problem of perineal rupture is sufficiently tall. In Indonesia, perineal lacerations have been recorded. About

75% of mothers give birth to vaginas. Meanwhile, in 2017, it was stated that a total of 57% of mothers get perineal sutures, with a record of 28% caused by episiotomy and around 29% caused by spontaneous tear.

In general, there are two factors that have influenced enough of the healing process of perineal wounds in mothers giving birth. These factors cover both internal factors and external factors based on narrative. Dar Smeltzer (2010). These internal factors consist of the following:

- 1. Nutrition that has understanding Where nutritious food and appropriate portions can cause Mother to be in healthy and fresh conditions as well as speed up the healing period,
- 2. Personal hygiene has a possible influence in healing perineal wounds. If cleanliness to Mother postpartum is not enough and she is not clean, sir, it can cause foreigners to give infection to network reproduction.
- 3. Condition health Mother determines cleanliness network reproduction, especially on the physical as well as mental sides. This matter can have an influence on healing, especially time healing. If condition Mother healthy, of course time healing will more fast.
- 4. Heredity and traits Genetics can also have an influence on the ability to inhibit insulin secretion, which makes glucose and blood sugar increase and also causes protein and calorie depletion.
- 5. Age give influence, share mothers who have old so will give opportunity lower speed healing wound.
- 6. Hemorrhage is accumulation made blood from room make a loss as well as cells death is a must removed from body.
- 7. Hypovolemia is the volume of blood that is not adequate for the recovery process and leads to vasoconstriction as well as the decline of available oxygen and nutrients in the healing wound.
- 8. Local factors such as edema decline supply oxygen with movement enhancement pressure interstitial to vessels blood
- 9. Deficit nutrition is one factor. Where insulin secretion can be inhibited as much as possible, glucose levels increase as well as Can cause protein-calorie depletion.
- 10. Deficit oxygen or insufficient oxygenation network: where oxygen in the body is not adequate, it appears from a lack of adequate function pulmonary and also cardiovascular. Stacking drainage that is secretion can be one reason for disruption of the healing process.
- 11. Overactivity can also be done to hinder sealing edge wounds and also heal wounds.
- 12. Temporary That There are a number of external factors that can hinder healing, consisting of wounds from:
- 13. Handling officer, where the midwife does not understand How to pay attention and give help to the client
- 14. Handling network, which is rough handling, can cause injury and also slow down healing.
- 15. Medicines can influence healing wounds, like steroids, which can disguise infection with a disturbing response from normal inflammation as well as anticoagulants. This matter can cause hemorrhage; antibiotics have a wide spectrum as well as contamination by bacteria inside the body.

Reason for lateness in healing wound the perineum is also influenced by knowledge from underprivileged mothers. How method healing wound the wound? An average mother is afraid to mobilize. For more details caused factor culture indeed Already become benchmark in the environment public. Like taboo to food certain and also lacking understanding about nutrition and also health as well as cleanliness they

Lateness in healing perineal wounds can result in infection. The condition of the affected perineum lochea is also damp. Can make bacteria appear so that infection in the perineal area will happen. Temporary second chance: complications or appearance infection in the perineal area is possible creeping to channel birth urinary and also deep road born, who can result in appearance complications, infection overdo urinary, and also infections in road born.

Infection postpartum that occurs causes complications perineal wounds, which include metritis, endometritis, and pelvic abscess. Opportunity third Can happen death postpartum mother with handling slow and possible complications cause happen death with condition physical already weak.

Insufficient perineal care can result in perineal conditions in pregnant mothers, can cause lochea, and is also damp so that it can support breeding bacteria. And this is possible because infection in the perineal area hinders the healing process of a wound from a pregnant mother. And healing wounds that occur in the area of the perineal tear can just be done with diverse variations. Someone recovered normally, and there are also those who experienced slowness. This matter is influenced by several aspects, like the

characteristics of Mother Maternity and her nutritional status, until conditions, injuries, and care from moms who are pregnant.

To overcome the problem, where is the information? to family about the need Mother during postpartum and have a correlation with personal hygiene, especially cleanliness in the vulva area, is a must done. Temporary role officer health is a must to be improved with service counseling and demonstrations about proper vulva hygiene care for perineal wounds. Then teach the mother the postpartum method and perform vulva hygiene; it should be true too, done counseling. The party family should also join in as well as give information to mothers postpartum to prevent infection.

## 2. RESEARCH METHODS

Research methods used in the research This is analytics correlational. Where own understanding as a method in search, explain something relationships and also estimates until test with base existing theory with objective To disclose the correlation between variables. Approaches used in research This, namely, a cohort with the researcher to do variable data collection independently or free, then next with dependent variable data collection or bound in support of internal primary data study.

## 3. RESEARCH RESULTS & DISCUSSION

In this research, the Sulastri Clinic explained general data, like characteristics of moms postpartum, contained in the table below.

Table 1. Age Data Respondent

No	Age	Frequency	Percentage (%)
1	Less than 21 Years Old	3	9.1
2	21 – 35 years	22	66.7
3	36 years old to on	8	24.2

From table 1 then Can mentioned that part great mothers postpartum This is in range age between 21 to 35 years with the total amount as many as 22 respondents or 66.7%. Temporary For respondents with age under 21 years There is about 3 people with rate 9.1%. Then for respondents with 36 years old to on There is around 8 respondents with percentage amounting to 24.2%.

Table 2. Number of Children

No	Number of children	Frequency	Percentage (%)
1	1 child	5	15.2
2	2 – 3 children	25	75.7
3	More of 3 children	3	9.1

Meanwhile in table 2 regarding Number of Children, from table the obtained if there are 25 mothers who have 2 to 3 children. Meanwhile, 5 respondents or mother who has 1 child with percentage amounting to 15.2%. Then there are 3 mothers who have it more of 3 children with percentage only 9.1 %.

Table 3. Education

No	Education	Frequency	Percentage (%)
1	Elementary school	0	0
2	School Intermediate First	12	36.4
3	School Upper Intermediate	18	54.5
4	College	3	9.1

For table 3, viz., distribution of mothers' education postpartum at the Sulastri Clinic, there are around 12 mothers who took their education last in junior high school, or around 36.4%. Whereas for mothers who go through education, finally in high school, there were around 18 mothers, with a percentage amounting to

54.5%. Then three mothers go through education college with a level percentage of 9.1%. There aren't any moms educational postpartum; the last one is school-based.

Table 4. Mother's Occupation

No	Work	Frequency	Percentage (%)
1	IRT	16	48.5
2	Farmer	10	30.3
3	Self-employed	6	18.2
4	Private	1	3

In table 4 regarding work from mothers postpartum, then obtained There are around 16 working mothers as housewives, housewife or housewife with a total of 16 mothers. Then there are 10 working mothers as farmers, or around 30.3%. Meanwhile, six mothers Work as self-employed with business alone. There is only one mother who works in the office as an employee.

The data above are general data obtained from the respondents' incoming pregnancy during the postpartum period. Meanwhile, in the table below, there are related special data with knowledge regarding vulva hygiene.

Table 5. Frequency of Vulva Hygiene

No	Behavior	Frequency	Percentage (%)
1	Correct	16	48.5
2	Wrong	17	51.5

From Table 5, real data was obtained. There are around 17 mothers who carry out vulva hygiene the wrong way. There are about 51.5% of mothers who don't perform vulva hygiene in the correct way. Temporary There are around 16 mothers who perform vulva hygiene in the correct way. There are around 48.5% of mothers who have done it correctly.

Table 6. Healing process wound

No	Healing wound	Frequency	Percentage (%)
1	Fast	15	45.5
2	Slow	18	54.5

In table 6 regarding the healing process perineal wound, yes, around 15 mothers experiencing postpartum acceleration healing perineal wounds, or around 45.5%. Temporary: Around 18 mothers experienced it slowing down the perineal wound, or around 54.5%. There isn't any quite a difference Far between 2 things.

Table 7. Correlation of Vulva Hygiene and speed healing Perineal wounds

Vulva Hygiene	Perineal Woun	Amount				
	Fast	Fast Slow				
	Freq	%	Freq	%	Freq	%
Correct	13	81.3	3	18.8	16	100
Wrong	2	11.8	15	88.2	17	100
Total	15	45.5	18	54.5	33	100
	$\alpha = 0.05$					

From table 7, data was obtained that mothers postpartum women who carry out the vulva hygiene process incorrectly and too late in healing perineal wounds are present in around 15 people, or 88.2%. From the results the data calculation uses the Chi-Square test,  $\alpha=0.05$ , and then obtains no fulfillment of the continued criteria using the Fisher's Exact Test, which uses a significant mark with a data p=0.000. From this data, Ho is rejected and H1 is accepted, which means that there is a correlation between the relationship between vulva hygiene and speed-healing perineal wounds that occur in mothers postpartum at the Sulastri Clinic.

On research, this is what was compiled with objective beginning research and also results statistics that present correlations from Vulva hygiene and also speed healing perineal wounds in mothers. You can do postpartum at the Sulastri Clinic. I obtained information, especially on Table 5; there is a big part from the respondents that is, Mother postpartum performs vulva hygiene. Which way is wrong? There are around 51.5% of mothers who.

Vulva hygiene itself is a maintenance carried out in the area of the genitals of the mother postpartum with the objective of avoiding infection and also caring for the vulvar and perineal health of incoming mothers in the postpartum period so as not to cause infection. Post-vulva hygiene care techniques and labor, when done the wrong way, can play quite an important role in healing wounds in the perineal area. If technique vulva hygiene care is done in the wrong way, especially to problem cleanliness, it can play a role in healing possible wounds that persist. This matter, of course, can only give the possibility that influence exists from a number of factors like parity and education.

This matter can be seen from related table 3 with education that part big Mother postpartum the own education final, namely where junior high school is, they carry out the vulva hygiene process in the wrong way. This matter caused by low education can influence somebody to get and also receive wrong information too. Temporary moms with higher education can have convenience because they can obtain descriptions regarding adequate vulva hygiene processes. On the contrary, moms with low education will sure experience difficulty understanding the importance of vulva hygiene, which can help speed up wounds in the perineum.

Education is all types of planned efforts to give other people's influence. Good individuals, groups, and society can do what is expected from the perpetrators, educators, and personnel health. Education can influence the knowledge of the individual who takes action with the basis and foundation knowledge gained by them. Of course, just education has enough influence to correct vulva hygiene behavior. Semain tall education received by mothers postpartum, then will It's also easy for mothers to get information.

Meanwhile, in Table 2, it is found that there is a small percentage, around 15.2% of mothers postpartum only have 1 child. This matter caused experience from underprivileged mothers in do vulva hygiene with Correct when entering the postpartum period. Mother has it child more from One have experience regarding the postpartum period. Good in this is the case vulva hygiene care if compared to with mother who has 1 child just. This matter caused a new mother experiencing the postpartum period to not get enough knowledge and experience about method guard cleanliness as well as performing proper vulva hygiene.

Parity Alone has more meaning than half. Mother is a multigravida, where she often gives birth to more from one place. This gives moms the opportunity to get experience in cleaning the reproductive organs with correct care. Meanwhile, in Table 6, you can obtain if part of the big mother postpartum or 54.5% speed healing running perineal wounds with slow healing.

Speed healing of the perineal wound represents getting better eventual perineal wound formed networks new with cover perineal wounds in term time (6 to 7 days postpartum). Temporary healing of perineal wounds will take a slow If after 7 days postpartum there is no network new one that covers the perineal wound area, And the perineal wound, which is not yet close, can influence the presence of infection in the area.

Lack of mobilization early by mothers postpartum This is caused by fear and pain in the wound area. Perineal sutures can be one factor in inhibiting healing perineal wounds. Temporary for mothers who have to do appropriate mobilization with the phase after giving birth, this can help speed up healing the perineal wound.

general data The cans obtained from that work as well as age can have an influence on healing perineal wounds. And some mothers postpartum—about 48.5%—are working as IRTs. This matter, of course, just has the correlation that mobilization carried out in accordance with phases and stages like strolling light can help heal the perineal wound.

The acceleration rate of perineal wounds that occurred at the Sulastri Clinic was sufficient and, of course, influenced by the vulva hygiene behavior carried out in the wrong way. Average turnover bandage when full is one cause of the healing process obstructed perineal wounds. This matter caused a humid temperature in the area. One of the other factors that influence healing wounds enough, based on Smeltzer (2010), is a lack of mobilization early and also a way of maintaining less injuries that is appropriate so that it can hinder healing wounds as well as bother healing wounds.

For age alone, postpartum mothers under 21 years of age are around 9.1%, and those over 35 years old are around 24.2%. This matter caused age. Mothers postpartum who are under 21 years old and over

35 years old often experience late healing wounds. This matter causes complications or complications that cause infection in the wound area.

Based on theory from Sukijonatoatmojo (2010), age-safe reproduction for pregnancy and also during the birth process, namely at the age of 20–30 years, This matter caused outside age the often happen complications Good during pregnancy and childbirth, as well as when entering the postpartum period.

From the results of the study, it was found that all over Mother postpartum, 81.2% performed vulva hygiene the wrong way. Then some small groups, or around 18.8%, practice vulva hygiene in the correct way. Beside that, slow perineal wounds occur in mothers who practice vulva hygiene in the wrong way. Then some small 11.8% experienced healing rapid perineal injury of correct vulva hygiene.

The results of data calculations using the Fisher's Exact Test are significant, which produces p = 0.000 and makes H 1 accepted. This matter gives proof that there is a correlation between vulva hygiene and speedy healing of perineal wounds at the Sulastri Clinic. Speedy healing of perineal wounds experienced by the mother postpartum can be influenced by how perineal care is provided after labor.

From this data Can taken conclusion If there is a correlation between vulva hygine and also healing perineal wounds, This is due to that vulva hygiene Can prevent happen infection that occurs factor main perineal injury lateness in healing . Of course, this is in accordance with the theory of healing wounds based on Smeltzer (2010). Personal hygiene or vulva hygiene has an influence on healing sufficient perineal wounds. If the cleaning process lacks self-esteem in postpartum mothers, of course, this can cause infection in the area of the reproductive organs.

Vulva hygiene, or cleanliness, lacking self-governance, of course, becomes a main factor in slowing down healing. This matter can cause germs or bacteria to enter with ease. Postpartum period: Of course, just notice and look after the cleanliness of the reproductive organ area. The reason is that during those times, lots of blood or lochea comes out of the vagina. And p This Can give opportunity germs For come in and you can give infection .

While the vagina itself is an open organ with convenience for entering germs that can spread to the wall of the womb, Perineal wounds that appear from episiotomy, rupture, and laceration make areas This own opportunity caught a major infection. Knowledge Mother about maintenance and finished labor, of course, gives opportunity to heal perineal wounds. With knowledge, mothers who are lacking can do it and give enough infection.

Study This is similar to the study from Puspitanani (2010), where there is a correlation between vulva hygiene and healing perineal wounds performed in the public health center in Mergangsan and also at Jetis Kota Yogyakarta. From the 24 respondents, there are 2 categories consisting of respondents who recovered the wound Enough Good with an achievement rate of 87.5%. Sperm Rho statistical test results then obtained a mark correlation of 0.659 with a level of significance p of 0.000 (p < 0.05). This means that Ho is rejected and the variable H1 is accepted.

From research This concluded If there is a correlation between vulva hygiene and healing perineal wounds, This matter shows that proper vulva hygiene can accelerate the healing of perineal wounds in mothers postpartum.

## 4. CONCLUSION

Deep conclusion study This obtained part of the big mother postpartum at the Sulastri Clinic vulva hygiene with less appropriate, so that own risk for getting a major infection. Then, part of the big mother postpartum at the Sulastri Clinic experienced speedy healing of the wound, but the perineum was slow due to incorrect vulva hygiene. There is a correlation between vulva hygiene and the speed of healing wounds in the perineum. Correct vulva hygiene can speed up the healing process in the perineum.

#### **ACKNOWLEDGEMENTS**

The author would like to thank all parties who have supported this article so that it can be completed and published in an international journal.

#### REFERENCES

- [1] Afrilia, EM, & Heliyanah Sari. (2018), Relationships knowledge Mother postpartum about maintenance perineal wounds with the healing process wound perineal rupture at the Community Health Center Pakuhaji Tangerang district, Indonesian Midwifery Journal, 1(2), pp. 1–7.
- [2] doi: http://dx.doi.org/10.31000/imj.v1i2.980
- [3] Alfahri, FD 2020, Plums as Deterrent Incident Preeclampsia in Pregnancy, Journal Sandi Husada Health Sciences, 9(2), pp. 735–740. doi: https://doi.org/10.35816/jiskh.v12i2.396.
- [4] Alvarenga, MB, et al. (2015), Episiotomy healing assessment: Redness, Oedema, Ecchymosis, Discharge, Approximation (REEDA) scale reliability, Revista Latino-Americana de Enfermagem, 23(1), pp. 162–168. doi: https://doi.org/10.1590/0104-1169.3633.2538.
- [5] Ariani, P. et al. 2020, Relationship between nutritional status and length of healing of post-cesarean section wounds, Doppler Journal, 4(2), pp. 49–54. Available at: https://scholar.google.com/scholar?hl=en&assdt=0%2C5&q=connection+s tatus+nutrition+with+lama+pemumbuhan+wounds+post&btnG =#d=gsqabs&u =%23p%3DQ7w4k0rYscJ.
- [6] Bahiyatun, 2009, Textbook of Midwifery Care: Normal Postpartum. Jakarta: EGC. Available at: https://books.google.co.id/books?id=ZkPup-5Ozy8C.
- [7] Bahrin, AA, et al. 2022, Cancer protective effects of plums: A systematic review, Biomedicine and Pharmacotherapy, 146, pp. 1–17. doi: 10.1016/j.biopha.2021.112568.
- [8] Barchitta, M. et al. 2019, Nutrition and Wound Healing: An Overview Focusing on the Beneficial Effects of Curcumin, International Journal of Molecular Sciences, 20(5), pp. 1–14. doi: 10.3390/ijms20051119.
- [9] Bekasi, D. 2020; Bekasi District Health Profile 2020; Bekasi District Health Service. Available at: https://diskes.jabarprov.go.id/assets/unduhan/16. BEKASI DISTRICT HEALTH PROFILE 2020.pdf.
- [10] BPS. 2021, Total Birth Rate According to Province 2012–2017, bps.go.id. Available at: https://www.bps.go.id/indicator/30/1399/1/angka-kelahiran-total-menrut-provinsi.html
- [11] Dalimartha, S., and Adrian, F. (2013). Scientific Facts on Fruits and Vegetables. Jakarta: Penebar PLUS. Available at: https://books.google.co.id/books?id=r5y0CAAAQBAJ.
- [12] Damanik, S., and Siddik, N. (2018). THE RELATIONSHIP OF MOTHER'S CHARACTERISTICS WITH PERINEAL RUPTURE IN THE HJ MATERNITY CLINIC. NIRMALA SAPNI KRAKATAU PASAR 3 MEDAN, Journal of Community Midwives, 1(2), pp. 95–103. doi: https://doi.org/10.33085/jbk.v1i2.3967.
- [13] Damayanti, DS et al. 2021, Relationship between Perineal Massage, Parity, and Newborn Weight with Perineal Rupture Incident, Journal For Healthy Communities, 5(1), pp. 52–60. doi: https://doi.org/10.52643/jukmas.v5i1.1119.
- [14] Darma, M., Yusran, S., & Faizal, A. (2017). Connection Knowledge, Vulva Hygiene, Stress, and Diet With Incident Flour Albus Infection (Vaginal Vaginal Discharge) in Teenagers Kendari State High School 6 Students Accessed July 20, 2018 from https://media.neliti.com/media/publications/198314-connection-knowledge-vulva-hygiene-stres.pdf
- [15] Dewi, D., Ratnawati, R., & Berlian, I. (2012), Relationships Early Mobilization With Speed Healing of Perineal Wounds in Postpartum Mothers in All Work Areas Public Health Center Singosari Malang Regency, Journal of Research Results, pp. 1–9. Available at: https://www.e-jurnal.com/p/jurnal-resident.html.
- [16] Ernawati. (2012). Early Mobilization and Vulva Hygiene in Postpartum Mothers in Rsia Sitti Khadijah I Makassar. Accessed on July 19, 2018 from http://www.poltekkes-mks.ac.id/images/MediaKesehatan/Vol-XI-Edisi-1-2016/8-JURNAL-ERNAWATI.pdf
- [17] Phase, Nadia. (2016). Influence of Murotal Al-Qur'an Against Depression Levels: Patient Fails Kidney Living Chronicles Hemodialysis at PKU Muhammadiyah Gamping Accessed on February 19, 2018 from http://repository.umy.ac.id/bitstream/handle/123456789/2472/BAB%20III.p df?sequence =7&isAllowed=y
- [18] Frilasari, H. et al. 2020, Nutritional Pattern and Healing of Perineal Wounds in the Postpartum Period, Journal of Nursing Practice, 3(2), pp. 172–180. doi: 10.30994/jnp.v3i2.85.
- [19] Gaikwad, SR, and Bhore, NR, 2019, A Study to Assess the Effect of Pineapple Extract on Episiotomy Wound Healing among Postnatal Mothers in Selected Hospitals of Sangli, Miraj, and Kupwad

- Corporation Area, Indian Journal of Public Health Research & Development, 10(7), pp. 399–403. DOI:10.5958/0976-5506.2019.01599.7
- [20] Harahap, F. et al. 2019, Pineapple Tissue Culture Surabaya: Friends Media Scholar. Available at: https://www.google.co.id/books/edition/KULTURJARINGANNANAS/ ewquDwAAQBAJ?hl = id&gbpv =1&dq= fruit+nanas&printsec = frontcover.
- [21] Harmanto, N., and Utami, P. (2013). Magic Herbal Medicine to Conquer Diabetes. Jakarta: AgroMedia Library. Available at: https://books.google.co.id/books?id=76bjAwAAQBAJ.
- [22] Harty, Mery. (2015). Relationship between Vulva Hygiene and Postpartum Mothers With Healing of Perineal Stitch Wounds at the Community Health Center Mergangsan and Jetis Health Centers, Yogyakarta City. Accessed on July 20, 2018 from http://digilib.unisayogya.ac.id/1885/1/naskah%20publikasi.pdf
- [23] Herawati, A., Mahdiyah, D., and Khatimah, H. (2016). Connection Occupation and Vulva Hygiene with Incident Vaginal Discharge in Pregnant Women at the Sungai Bilu Community Health Center, Banjarmasin. Accessed on September 27, 2017 from http://ojs.bisnisakesehatan.stikessarimulia.ac.id/index.php/dksm/article/vi ew/132
- [24] Herawati, Puspitarani . (2010). Connection Perineal Care With Healing of Perineal Wounds in Postpartum Mothers on the Sixth Day at the Midwife Practice Private (BPS) Mrs. Sri Suhersi Mojokerto Kedawung Sragen Accessed on July 8, 2018 from file:///C:/Users/hp/AppData/Local/Temp/HUBUNGAN% 20PERAWATAN % 20PERINEUM% 20WITH% 20HEALTH% 20WOUNDS% 20PERI NEUM% 20ON% 20MOTHER% 20NOUNCE% 20DAYS% 20SIXTH% 20IN% 2 0MIDWIFERY.pdf
- [25] Herlina, Virgia, V., and Wardani, R. (2018). The Relationship between Vulva Hygiene Techniques and Healing of Perineal Wounds in Postpartum Mothers, Journal Midwifery Malahayati, 4(I), pp. 5–10. Available at: https://scholar.google.com/citations?viewop=viewcitation&hl=en&oe=ASCII&user =5ojBAeIAAAAJ&cstart=100&pagesize=100&citationfor view=5ojBAeIAAAAJ:Y1W0x10ZrwMC.
- [26] Hidayat, A. Alimul. 2009. Research Methods in Nursing and Data Analysis Techniques. Jakarta. Salemba Medika.
- a. https://opac.perpusnas.go.id/DetailOpac.aspx?id=32259
- [27] Indramawanti & Wijayanti . (2014). Connection Postpartum Mothers' Attitudes in Early Detection of Postpartum Complications with Accuracy Visit Postpartum at BPM Sri Lumintu Jajar Surakarta. Accessed on August 10, 2018 from http://jurnal.abdihusada.ac.id/index.php/jurabdi/article/view/49/49
- [28] Ini, M. (2016). Smart Nutrition for Pregnant and Breastfeeding Women with Blood Type A. Jakarta: Bhuana Knowledge Popular Available at: https://books.google.co.id/books?id=gk1GDwAAQBAJ.
- [29] Iqmy, LO 2017, Overview of Related Factors With It Happened Perineal Rupture in Mothers Giving Birth at BPS Lili Zulriatni and Keb Candimaskec Village Natar South Lampung Regency 2015, Journal Midwifery Malahayati, 3(1), pp. 1–7. Available at: http://www.ejurnalmalahayati.ac.id/index.php/kebidanan/article/download/595/529.
- [30] Juliati, Riskina, Z., and Riska, CA 2020, Relationship between Birth Spacing and Birth Weight with Incident Perineal Rupture in Normal Delivery at Rsu Tgk Chik Ditiro 2019), Journal of Healthcare Technology and Medicine, 6(1), pp. 599–607. Available at: http://www.jurnal.uui.ac.id/index.php/JHTM/article/view/931/457.
- [31] Kasari, IAD, and Wahyuni, C. (2021), Analysis of Abstaining from Eating with a Degree of Perineal Injury to Healing Wounds in Postpartum Mothers on the 7th Day at PMB Mrs. Indah S. W., SST Cendono Village Subdistrict Kandat, Journal of Women and Children, 1(1), pp. 46–57. doi: https://doi.org/10.22219/jpa.v1i1.12503.
- [32] Kirana, Yuke. (2015). Relationship Between Post-Partum Anxiety Levels and Post-Partum Blues Incident at Dustira Hospital Cimahi Accessed on September 27, 2017 from http://ejournal.bsi.ac.id/ejurnal/index.php/jk/article/view/150/115
- [33] Kurniarum, A. (2016). Midwifery Care: Childbirth and Newborns. Jakarta: Health HR Education Center. Available at: http://bppsdmk.kemkes.go.id/pusdiksdmk/wp-content/uploads/2017/08/Asuhan-Kebidanan-Persalinan-dan-BBL-Komprehensif.pdf.
- [34] Latantsa, Fikri. (2016). Relationship Between Levels of Spirituality and Anxiety Levels and Mechanisms Coping First Level Students of FKIK UMY. Accessed on February 19, 2018 from

- http://repository.umy.ac.id/bitstream/handle/123456789/7320/7.%20BAB% 20III.pdf?sequence=7&isAllowed=y
- [35] Lestari, P. 2016, Age Influential Dominant to Behavior Perineal Wound Care in Postpartum Women at Sleman Regional Hospital, Indonesian Journal of Nursing and Midwifery, 4(2), pp. 95–101. doi: 10.21927/jnki.2016.4(2).95-101.
- [36] Liu, W. et al. 2020, Chemical Constituents and Health Benefits of Four Chinese Plum Species, Journal of Food Quality, 2020. doi: 10.1155/2020/8842506.
- [37] Lowdermilk, D.L. et al. (2016). Maternity & Women's Health Care, 11th Edit, Elsevier. 11-year-old Edit. China: Elsevier. doi: 10.1097/00005237-199809000-00012.
- [38] Manalu, AB, and Purba, TJ 2021, Influence of Breast Milk and Decoction of Kersen Leaves on the Length of Treatment Time and Healing of Perineal Wounds in Postpartum Women at the Citra District Clinic, Patumbak Deli Serdang Regency, Doppler Journal, 5(2), pp. 31–39. Available at: https://scholar.google.com/scholar?hl=en&assdt=0%2C5&q= Influence+ p enggunaan+asi+dan+rebusan+daun&btnG =#d=gsqabs&u=%23p%3Dud2 6NjZChcQJ.
- [39] Marcelina, RF, and Nisa, F. (2018), The Relationship Between Abstinence Food and Healing Perineal Wounds in the Mawar Rsi Room, Jemursari Surabaya, The Indonesian Journal of Health Science, 10(2), pp. 101–109. doi: 10.32528/ijhs.v10i2.1862.
- [40] Mas'adah, S. 2010. The Relationship Between Habits, Abstinence, Food, and Healing Perineal Wounds During the Postpartum Period.
- [41] Masturoh, I., and Anggita, N. (2018). Methodology in Health Research. Ministry of Health of the Republic of Indonesia. Available at: http://bppsdmk.kemkes.go.id/pusdiksdmk/wp-content/uploads/2018/09/Metodologi-Penelitian-KesehatanSC.pdf.
- [42] Mohd Ali, M. et al. 2020, Pineapple (Ananas comosus): A comprehensive review of nutritional values, volatile compounds, health benefits, and potential food products, Food Research International, 137 (April), BL 109675. doi: 10.1016/j.foodres.2020.109675.
- [43] Murniati, A. (2018), The Difference in the Length of Healing Process of the Perineal Wound on the Puerperal Mother who Performs Abstinence Food Pattern'TARAK, The 2nd Joint International Conferences, 2(2), pp. 77–82. Available at: https://proceeding.tenjic.org/jic2/index.php/jic2.
- [44] Muslihah, N. et al. 2021, Principles and Applications Methodology in Nutrition Research Malang: Brawijaya University Press. Available at: https://www.google.co.id/books/edition/PrinsipdanAplikasiMetodologi Researchers / xqFgEAAAQBAJ?hl = id&gbpv =1&dq= interpretation+value+kappa & pg =PT87&printsec= frontcover.
- [45] Musrifatul, Uliyah (2008). Textbook of Midwifery Care, 3 Postpartum. Yogyakarta: Medical Book
- [46] Natalia, C., Marcelina, LA, and Permatasari, I. (2021), The Relationship between Nutritional Status and Fulfillment of Nutritional Needs With Condition of Perineal Wounds in Postpartum Mothers at the Community Health Center Fighters and Community Health Centers Pekayon, Journal Widya Gantari Indonesian Nursing, 5(2), pp. 89–96. doi: 10.52020/jkwgi.v5i2.3224.
- [47] Notoatmodjo, S. (2010). Methodology in Health Research. Jakarta: Rineka Cipta.
- [48] Notoatmodjo, 2010. Health Research Methods. Jakarta: PT. Rineka Cipta
- [49] Nugrahini, Evi Yunita, Susilorini & Sari, Amalia puspita. 2016, Meneran Engineering Relations With Incident Perineal Rupture in Primigravida at Polindes Dear Mother, Journal Health Research, 14(1), pp. 16–20. Available at: http://journal.poltekkesdepkes-sby.ac.id/index.php/JPK/article/view/380/310.
- [50] Nugroho et al. (2014. Textbook of Midwifery Care 3 Postpartum. Yogyakarta: Medical Book
- [51] Nugroho, T., et al. (2014. Books: Midwifery Care Teachings Postpartum (Askeb 3). Yogyakarta: Nuha Medika
- [52] Nurrahmaton & Sartika, D. (2018), Relationships Post-Partum Mothers' Knowledge About Perineal Wound Treatment Using the Wound Healing Process in the Clinic Maternity Hj. Nirmala Sapni Medan, Journal of Community Midwives, 1(1), pp. 20–25. doi: https://doi.org/10.33085/jbk.v1i1.
- [53] Nursalam, 2008. Concept and Application Methodology Study Knowledge Nursing, Jakarta: Salemba Medika
- [54] Nursalam, 2008. Concept and Application Study Nursing, Salemba Medika
- [55] Oxorn, H., and William R. F. (2010. Midwifery Science, Pathology, and Physiology Persalinan. Yogyakarta: ANDI OFFSET.

468

[56] Prawirohardjo Sarwono, 2011. Science and Midwifery, 2008. Jakarta: PT. Build References Int Jou of PHE

- [57] Purnani, WT 2019, Differences Effectiveness of Giving Egg White and Snakehead Fish to Healing Perineal Wounds in Postpartum Women, Journal of Public Health Research and Community Health Development, 2(2), pp. 138–145. doi: 10.20473/jphrecode.v2i2.12190.
- [58] Putri, AB, & Anita, A. 2017, Anti-Inflammatory Effects of Enzyme Pineapple Bromelain Against Osteoarthritis, Journal of Medicine, 8(3), pp. 489–500. doi: 10.26630/jk.v8i3.681.
- [59] Ricci, S.S., Kyle, T., & Cartman, S. (2013), Maternity and Pediatric Nursing, Wolters Kluwer Health, China. Available at: https://3lib.net/book/5537093/a672d7.
- [60] Rochmayanti, SN, and Ummah, K. (2019). Perineal Massage During Pregnancy to Spontaneous Perineal Rupture Surabaya: Jakad Media Publishing. Available at: https://books.google.co.id/books?id=Ui3ZDwAAQBAJ.
- [61] Rohmin, A., Octariani, B., & Jania, M. 2017, Risk factors that influence the length of healing of perineal wounds in postpartum mothers, Journal of Health, 8(3), pp. 449–454. doi: http://dx.doi.org/10.26630/jk.v8i3.660.
- [62] Rukiyah, AI; Yulianti, L. (2014). Midwifery Care IV (pathological). Jakarta: Trans Info Media a. https://opac.perpusnas.go.id/DetailOpac.aspx?id=1008196
- [63] Safitri, H., Amila, & Aritonang, J. 2021, Methodology Textbook Health Research. Editorial officer van AH Nadana. Malang: Ahlimedia Press. Available at: https://id.3lib.net/book/18499958/369302.
- [64] Saifuddin. 2012. Maternal and Neonatal Health Services. Jakarta: PT. Bina Pustaka Prairohardjo.
- [65] Sebayar, WBR, and Ritonga, F. (2021), Nutrition Effectively Speeds Up Healing of Perineal Wounds in Postpartum Mothers (Systematic Review)", Journal of Health, 12(2), pp. 330–336. doi: http://dx.doi.org/10.26630/jk.v12i2.1790.
- [66] Simarmata, OS, et al. (2015), Determinants of Incident Complications in Childbirth in Indonesia: Analysis of Secondary Data from Basic Health Research, Journal of Reproductive Health, 5(3). Available at: https://sinta.kemdikbud.go.id/journals/detail?q=Determinan+incident+complication+persalinan&search = 1&id=22.
- [67] Simbolon, D. 2019, Stunting Prevention Through Specific Nutritional Interventions for Breastfeeding Mothers of Children Aged 0–24 Months. Surabaya: Friends Media Scholar. Available at: https://play.google.com/books/reader?id=KdjFDwAAQBAJ&pg=GBS.PR 4&hl=en.
- [68] Smeltzer, SC & Bare, BG, 2010, Textbook of Medical Surgery Issue 8 Volume 2, over Language Kuncara, HY, et al., EGC, Jakarta
- [69] Sugiharto, RT 2017, Health Encyclopedia: Food and Nutrition. Yogyakarta: Hikam Pustaka. Available at: https://books.google.co.id/books?id=WHVWEAAAQBAJ.
- [70] Sulastri, Wiwin . (2016). Relationship Between Mother's Anxiety Level and Providing Breast Milk During the Postpartum Period at the Community Health Center Umbulharjo 1 Yogyakarta. Accessed on July 20, 2018: http://digilib.unisayogya.ac.id/2166/1/NASKAH%20PUBLICATION%20PDF.pdf
- [71] Sulistianingsih, A., & Wijayanti, Y. 2019, Influencing Factors to Healing of Perineal Wounds in Postpartum Mothers, Journal for Quality in Women's Health, 2(1), pp. 11–18. doi: 10.30994/jqwh.v2i1.22.
- [72] Timbawa, S. et al. (2015. The relationship between vulva hygiene and prevention of perineal wound infection in postpartum mothers at Pancaran Kasih Hospital, GMIM Manado, (online), Vol. 3, No. 1, (https://ejournal.unsrat.ac.id/), accessed September 16, 2018.
- [73] Timbawa, S., Kundre, R., & Bataha, Y. (2015). Vulva Hygiene's Relationship with Prevention of Perineal Wound Infection in Postpartum Mothers at Pancaran Kasih GMIM Manado Hospital Retrieved September 27, 2017 from <a href="https://ejournal.unsrat.ac.id/index.php/jkp/article/view/9598/9176">https://ejournal.unsrat.ac.id/index.php/jkp/article/view/9598/9176</a>
- [74] Surahman, Rachmat, M., and Supardi, S. (2016). Methodology Study. Jakarta: Ministry of Health of the Republic of Indonesia. Available at: http://bppsdmk.kemkes.go.id/pusdiksdmk/wp-content/uploads/2017/08/Metodologi-Penelitian-Komprehensif.pdf.
- [75] Susilawati, S., Patimah, M., and Imaniar, MS 2020, Determinants of Long-Term Healing of Perineal Wounds in Postpartum Women, Faletehan Health Journal, 7(3), pp. 132–136. doi: https://doi.org/10.33746/fhj.v7i03.187.
- [76] Sutomo, B., and Kurnia, D. (2016). 378 Juice Recipes and Herbal Concoctions: Tumpas Disease: Light to Heavy. Depok: PT. Library Friends. Available at: https://books.google.co.id/books?id=JaEeDgAAQBAJ.

- [77] Syamsiah, S., & Malinda, R. 2019, Determinants of Incident Perineal Rupture at Bpm EN Surabaya, Journal Health Sciences, 10(2), pp. 190–198. doi: 10.37012/jik.v10i2.54.
- [78] Tridiyawati, F., and Santika, N. 2019, Relationships Knowledge of Postpartum Mothers to Perineal Wound Care, Intermediate Journal of Obstetrics, 2(2), pp. 54–62. doi: https://doi.org/10.37063/ak.v2i2.37.
- [79] Untari, S., & Ekasari, WU 2019, Relationships Parity and Birth Weight of Babies with Perineal Rupture in Maternity Mothers, The Shine Cahaya Dunia Ners, 05, pp. 64–69. Available at: https://ejournal.annurpurwodadi.ac.id/index.php/TSCBid/article/view/191/213.
- [80] Wahyuningsih, HP 2018, Midwifery Care Postpartum and Breastfeeding. Jakarta: Ministry of Health of the Republic of Indonesia. Available at: http://bppsdmk.kemkes.go.id/pusdiksdmk/wp-content/uploads/2018/09/Asuhan-Kebidanan-Nifas-dan-MenyusuiSC.pdf.
- [81] Wulandari, P., Arifianto & Zuhara, IK 2016, Related Factors With Incident Spontaneous Perineal Rupture in Bpm Mrs. Natalia District Genuk Semarang City, Journal of Holistic Nursing Science, 3(2), pp. 1–7. Available at: http://journal.unimma.ac.id/index.php/nursing/article/view/867.
- [82] Yuniarti et al. (2021), Determinant to Healing of Perineal Wounds in Postpartum Women in Practice: Independent Midwives of Palangkaraya City, Surya Medika Journal, 7(1), pp. 94–98. doi: https://doi.org/10.33084/jsm.v7i1.2633.