

Efektifitas Pijat Perineum Terhadap Ruptur Persalinan di PMB Sri Winarni

King King Hoerunisach¹, Gusrida Umairo², Abela Mayunita³

^{1,2,3}STIKES Abdi Nusantara, Indonesia

Corresponding Author: King King Hoerunisach, e-mail: kingkinghoerunisach289@gmail.com

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ABSTRAK

Ruptur perineum merupakan robekan obstetrik yang terjadi akibat ketidakmampuan otot panggul dan jaringan lunak saat persalinan normal (Fatimah dkk., 2019). Ruptur perineum lebih mungkin terjadi pada ibu dengan persalinan primipara, janin besar, proses persalinan lama, atau persalinan dengan bantuan alat bantu, seperti forcep atau vakum (Adrian dalam Kartiningsih, dkk., 2021). Di PMB Sri Winarni, jumlah kejadian ruptur perineum pada tahun 2022 sebanyak 66 kasus, meningkat dari tahun 2021 yang sebanyak 40 kasus. Data kejadian ruptur perineum yang tercatat sejak awal tahun 2023 hingga saat ini, berjumlah 25 kasus. Salah satu upaya pencegahan ruptur perineum adalah dengan melakukan pijat perineum. Pijat perineum dilakukan selama kehamilan atau beberapa minggu sebelum melahirkan untuk meningkatkan perubahan hormonal yang melunakkan jaringan ikat, sehingga jaringan perineum lebih elastis dan lebih mudah meregang. Tujuan: Untuk mengetahui efektivitas pijat perineum terhadap ruptur perineum pada ibu bersalin di PMB Sri Winarni. Penelitian ini bersifat analitik kuantitatif dan menggunakan rancangan penelitian Quasi Experimental Design (eksperimen semu). Penggunaan Teknik Purposive Sampling dengan jumlah responden sebanyak 20 orang. Penelitian ini menggunakan variabel Pijat Perineum sebagai variabel bebas, dan variabel Ruptur Perineum sebagai variabel terikat. Data yang digunakan diperoleh dari lembar observasi dan kuesioner yang kemudian dianalisis menggunakan analisis Independent Sample T Test pada program SPSS. Dari 20 responden, sebanyak 12 orang (60%) tidak mengalami ruptur perineum, terdapat 6 orang (30%) yang mengalami ruptur derajat 1, dan 2 orang (10%) mengalami ruptur perineum derajat 2. Dan berdasarkan perhitungan Independent Sample T Test diperoleh nilai Asymptotic Significance (2-sided) = 0,008 dimana $< 0,05$. Maka dapat disimpulkan bahwa H_0 ditolak dan H_a diterima yang menunjukkan Efektivitas Pijat Perineum terhadap Ruptur Perineum pada Ibu Melahirkan di PMB Sri Winarni.

Kata Kunci: Efektivitas, Pijat Perineum, Ruptur Persalinan

ABSTRACT

Rupture is an obstetric tear that occurs due to the inability of the pelvic muscles and soft tissues during normal labor (Fatimah et al., 2019). Perineal rupture is more likely to occur in mothers with primiparous births, large fetuses, long labor processes, or labor with the help of tools, such as forceps or vacuum (Adrian in Kartiningsih, et al., 2021). At PMB Sri Winarni, the number of rupture incidents in 2022 was 66 cases, an increase from 2021 which was 40 cases. The data on rupture incidents recorded from early 2023 to the present, amounted to 25 cases. One effort to prevent rupture is to perform perineal massage. Perineal massage is performed during pregnancy or a few weeks before giving birth to increase hormonal changes that soften the connective tissue, so that the perineal tissue is more elastic and easier to stretch. To determine the effectiveness of perineal massage on perineal rupture in mothers giving birth at PMB Sri Winarni. This research is quantitative analytical and has a Quasi Experimental Design (quasi-experimental) research design. The use of Purposive Sampling Technique with a total of 20 respondents. This study uses the Perineal Massage variable as the independent variable, and the Perineal Rupture variable as the dependent variable. The data used were obtained from observation sheets and questionnaires which were then analyzed using the Independent Sample T Test analysis in the SPSS program. Of the 20 respondents, 12 people (60%) did not experience perineal rupture, there were 6 people (30%) who experienced grade 1 rupture, and 2 people (10%) experienced grade 2 perineal rupture. And based on the calculation of the Independent Sample T Test, the Asymptotic Significance value (2-sided) = 0.008 was obtained where < 0.05 . So it can be concluded that H_0 is rejected and H_a is accepted, which indicates the Effectiveness of Perineal Massage on Perineal Rupture in Mothers Giving Birth at PMB Sri Winarni.

Keywords: Effectiveness, Perineal Massage, Labor Rupture

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INTRODUCTION

Perineal rupture is experienced by 85% of women during childbirth. The prevalence of mothers who experience perineal rupture in Indonesia in the 25-30 year age group is 24% while in mothers aged 32-39 years it is 62%. Perineal rupture is a cause of postpartum maternal bleeding (Lailatri in Anggraeni, 2023). In developing countries, the main causes of maternal death are direct obstetric factors, namely postpartum hemorrhage, infection and eclampsia.

Perineal rupture can cause postpartum hemorrhage. Postpartum hemorrhage is an important problem because it is related to maternal health which can cause death (Anggraini, 2018).

The prevalence of mothers giving birth who experience perineal tears in Indonesia in the 25-30 year age group is 24%, and in mothers aged 32-39 years it is 62%. In 2020, it was known that in Indonesia the incidence of perineal rupture in mothers giving birth was experienced by 83% of mothers giving birth vaginally, it was found that from a total of 3,791 mothers who gave birth spontaneously vaginally, 63% of mothers received perineal stitches, namely 42% due to episiotomy and 38% due to spontaneous tears (Ministry of Health of the Republic of Indonesia, 2021). At the study location, namely the Sri Winarni Independent Midwife Practice (PMB), there were no deaths during labor and postpartum, so the Maternal Mortality Rate (MMR) was 0 cases. The number of rupture cases in 2022 was 66 cases, an increase from 2021 which was 40 cases. The data on rupture cases recorded from early 2023 to the present, amounted to 25 cases. The results of a study by the Bandung Research and Development Center (Puslitbang) in several provinces in Indonesia found that one in five mothers giving birth who experience perineal rupture will die with a percentage of 21.74% (Prawirohardjo, 2013). Manuaba in Husnida et.al (2022) explains the factors causing perineal rupture, which consist of maternal factors such as: parity, precipitous labor, prolonged labor and maternal age. Fetal factors include: large babies, abnormal head position, breech birth and shoulder dystocia. The many causes of perineal rupture can be classified as risk factors in the form of parity, age and weight of the baby which contribute to perineal rupture where these causes already exist during pregnancy/before the mother enters the second stage of labor. To prevent the occurrence of infection or other complications during the postpartum period, especially with perineal rupture, it can be done by improving the quality of health services, including intensive perineal care. Childbirth with perineal rupture if not handled effectively causes bleeding and infection to become more severe, and in the long term can interfere with the mother's comfort in terms of sexual intercourse (Wiknjosastro in Nurhayati, 2023). One effort to prevent rupture is to do perineal massage. Perineal massage is done during pregnancy or a few weeks before giving birth to increase hormonal changes that soften the connective tissue, so that the perineal tissue is more elastic and easier to stretch.

RESEARCH METHOD

This research is included in the type of quantitative research that is analytical correlation and has a Quasi experimental design (quasi-experiment). The use of sampling techniques with the Purposive Sampling method with the number of samples to be used is 20 respondents. The data used comes from data collection through questionnaires, observation sheets and medical records recorded at PMB Sri Winarni, which are then subjected to Univariate analysis and Bivariate analysis using the Independent Sample T Test in the SPSS program.

RESULTS AND DISCUSSION

Results

1. Univariate Analysis

Table 1 Respondent Characteristics

No	Variabel	Intervention Group		Control Group	
		n	%	n	%
1	Mother's age				
	Not risky (20-35)	7	70%	6	60%
	High risk (<20, >35)	3	30%	4	40%
2	Parity				
	Primipara	7	70%	7	70%
	Multipara	3	30%	3	30%
	Total	10	100%	10	100%

Source: Analysis Results, 2023

Based on the table above, from a total of 20 respondents in the intervention group and control group, it can be seen that most (65%) of respondents are at a non-risk age. As for Parity Status, most (70%) of respondents are primipara.

Table 2 Frequency Distribution based on Perineal Massage Absence in Control and Intervention Groups

No		Intervention Group			
		n	%	n	%
1	Good (20-29 time)	8	80%	0	0%
2	Currently (10-19 time)	2	20%	0	0%
3	Bad (0-9 time)	0	100%	10	100%
	Total	10	100%	10	100%

Based on the table above, from a total of 10 respondents in the, 8 people (80%) of them underwent perineal massage well, while 2 people (20%) others underwent perineal massage with a moderate category. As for the control group, the absence of all respondents was included in the bad category, because the frequency of massage was only 0-9 times in the 2 months before the delivery process, this is based on the respondents' perceptions in filling out the questionnaire.

Table 3 Frequency Distribution based on Perineal Rupture Incidence

Perineal Rupture	Intervention Group		Control Group	
	n	%	n	%
Yes, Degrees 1	1	10%	5	50%
Yes, Degrees 2	0	0%	2	20%
No	9	90%	3	30%
Total	10	100%	10	100%

Source: *Analysis Results, 2023*

Based on the table above, the majority (90%) of respondents who underwent perineal massage did not experience perineal rupture, only 10% experienced grade 1 rupture. Meanwhile, in the control group, half (50%) experienced grade 1 perineal rupture, 20% experienced grade 2 perineal rupture, and 30% did not experience perineal rupture. Source: *Analysis Results, 2023*

2. Bivariate Analysis

Table 4 Cross Tabulation of Perineal Massage Frequency with Perineal Rupture Incidence

		Rupture						p-value	CI 95%	
		No	%	Yes, Degrees 1	%	Yes, Degrees 2	%		Lower	Upper
massage	Good	8	40%	0	0%	0	0%	0,008	-1.352	-.248
	Currently	1	5%	1	5%	0	0%			
	Bad	3	15%	5	25%	2	10%			
Total		12	60%	6	30%	2	10%			

Source: *Analysis Results, 2023* Based on the table above, it can be seen that the majority (40%) of respondents who performed perineal massage well did not experience perineal rupture during the labor process. Then respondents who performed moderate perineal massage, there were 10% who did not experience rupture and 10% had grade 1 rupture. In addition, respondents who performed perineal massage poorly, Most (25%) of respondents experienced grade 1 rupture and 10% had grade 2 rupture. Sig. Value (2-tailed) of 0.008 < 0.05, then as the basis for decision making in the Independent Sample T-test it can be concluded that H0 is rejected and Ha is accepted. This means that there is a significant difference (real) between the effect of perineal massage and the incidence of rupture in the Intervention Group and the Control Group, so it can be concluded that there is the Effectiveness of Perineal Massage Against Perineal Rupture in Mothers Giving Birth at PMB Sri Winarni.

Discussion

From the results of the bivariate analysis, as the basis for decision making in the Independent Sample T-test, it can be concluded that H0 is rejected and Ha is accepted. Thus, it can be concluded that there is

a significant (real) difference between the effect of perineal massage and the incidence of rupture in the Intervention Group and the Control Group.

The results of this study are in line with the research of Yulianti, et.al (2021) on primigravida mothers aged 37-40 weeks of pregnancy totaling 28 people in the Selakau Health Center area. The results of the statistical test using the Chi Square test obtained a p Value = 0.041 less than the significance level value set by the researcher, which is $\alpha = 0.05$, so it can be concluded that there is a relationship between perineal massage and the incidence of perineal tears. The results of the study showed that perineal massage is effective in reducing the risk of perineal tears in primigravida mothers in the Selakau Health Center area. The perineum that was not massaged had a 16.8 times greater risk of perineal tears, compared to the perineum that was massaged. This proves that primiparous mothers have a greater risk of experiencing Perineal Rupture, in accordance with what was stated by Kartiningsih, et.al (2021) that the benefits of perineal massage can help soften the perineal tissue, the tissue will open without resistance during labor and can make it easier for the baby to pass. Perineal massage is very important, especially for mothers who are giving birth for the first time considering the very large positive impacts obtained. Regular perineal massage is needed in order to obtain optimal benefits. The role of midwives, husbands and families is very much needed in providing support while the mother is doing perineal massage (Farida, 2021).

This study is also in line with the study conducted by Anggraini, et al (2019), entitled "The Effect of Perineal Massage in the Third Trimester of Pregnancy on Primigravida Perineal Tears at the Jagir Health Center, Surabaya", Based on the results of statistical tests using the Mann Whitney test program on the computer, a significance value of $q = 0.001$ was obtained, which means that H_0 is rejected, which means that there is an effect of perineal massage in the third trimester of pregnancy on primigravida perineal tears in the Jagir Health Center Work Area, Surabaya. Based on the results of the influence test, it showed that out of 10 respondents in the treatment group, almost all (80%) did not experience perineal tears, and out of 10 respondents in the control group, most (60%) experienced perineal tears (Anggraini, et al, 2019).

Ishak & Ft Physio in Lumy et.al (2022) explained that perineal massage is more effective in preventing perineal rupture because perineal massage is carried out several weeks before delivery, namely starting from 36 weeks of pregnancy continuously 5 times a week. This will result in positive changes in the perineal area so that the perineum becomes elastic, flexible and supple. Thus, the incidence of perineal rupture can be minimized or even not ruptured at all (Lumy, et al., 2022)

Based on the results of the study, which concluded that there was an effectiveness of perineal massage on perineal rupture, it shows that the theory put forward by Hidayati in Handayani (2018) who concluded in her research that perineal massage is very effective in preventing perineal lacerations. Perineal massage in pregnant women is effective in preventing perineal rupture during labor. Perineal

massage that is carried out routinely from a gestational age of > 34 weeks is effective in reducing the risk of perineal rupture, especially in primiparous mothers because the muscles of the perineum and vagina become more elastic and stronger. Regular perineal massage is needed to obtain optimal benefits. The role of midwives, support from husbands and families is very much needed for pregnant women in regularly performing perineal massage (Kartiningsih, 2021).

Pregnant women who were respondents in the Intervention group at PMB Sri Winarni, the majority performed Perineal Massage activities routinely, as stated in the observation sheet, and most claimed to do the massage independently at their respective homes. The researcher believes that this is what can reduce the possibility of perineal rupture during the labor process, considering that most respondents in this intervention group were mothers with primipara gravida status. Mothers who had given birth at PMB Sri Winarni, who were respondents in the control group in this study, mostly did not perform perineal massage routinely as attached to the questionnaire sheet. The researcher believes that this is what can increase the possibility of perineal rupture during the labor process, considering that most respondents in this control group were mothers with primipara gravida status. Seeing this, based on the researcher's point of view, pregnant women who routinely do perineal massage will reduce the potential for perineal rupture, this is because pregnant women already know the urgency of perineal massage activities. Mothers who routinely do perineal massage tend to have a smooth labor process, because they already know that doing perineal massage will smooth blood flow, stretch muscles and control themselves when pushing. Pregnant women need to do perineal massage regularly, starting from 34-38 weeks of pregnancy where they only do perineal massage 3 times a week, until 39-40 weeks of pregnancy, where perineal massage is done every day until labor, this is done to reduce the potential for perineal rupture. Mothers who routinely do perineal massage tend to have a smooth labor process, because they already know that doing perineal massage will smooth blood flow, stretch muscles and control themselves when pushing. Therefore, pregnant women aged 34-40 weeks are advised to do Perineal Massage (Togatorop, 2019).

CONCLUSION

Of the 20 respondents, 12 (60%) did not experience perineal rupture, 6 (30%) experienced first-degree rupture, and 2 (10%) experienced third-degree rupture. The 2-tailed significance value was $0.008 < 0.05$. Therefore, as the basis for decision-making in the Independent Sample T-test, H_0 is rejected and H_a is accepted. Therefore, it can be concluded that there is a significant difference between the effect of perineal massage on rupture events in the Intervention Group and the Control Group.

REFERENCES

- Anggraeni, et al (2023), "Effectiveness of Perineal Massage on Labor Rupture in Pmb Nelis Anggraeni Klari-Karawang", Bina Cipta Husada Journal Vol. XIX, No. 2, 40 – 53. Bappeda Banten 2019, Laporan Penelitian Strategi Penurunan Kematian Ibu Dan Anak
- Fatimah and Lestari, P (2019), "Perineal Massage (Reducing Perineal Rupture for the General Public, Pregnant Women and Health Students". Pustaka Baru Pres. Yogyakarta.
- Halimahi, N, et al (2022), "Perineal Massage to Reduce the Risk of Tearing in the Birth Canal of Pregnant Women in Group III, Pasekan Ambarawa Village, Semarang Regency", Proceedings of the National Seminar and Call for Paper on Midwifery, Ngudi Waluyo University Volume 1 No (2).
- Husnida, N, et al (2022). "The Effect of Parity, Maternal Age and Infant Weight on Perineal Rupture in Mothers Giving Birth at the Mandala Rangkasbitung Health Center in 2020", Journal of Midwifery and Health Research Vol. 1, No. 1 2022, pp. 1-9.
- Inamah, N, et al (2023), "Effectiveness of Perineal Massage on Perineal Rupture in Primigravida Women Giving Birth at BPM Tanjung Redeb, Berau Regency", Cerdika: Indonesian Scientific Journal, March 2023, 3 (3), 266-274.
- Kartiningih, et al (2021), "Perineal Massage is Effective in Preventing Perineal Rupture in Women in Labor: Literature Review", Proceedings of the National Health Information Seminar (SIKESNas), Duta Bangsa University, Surakarta.
- Ma'rifah, U & Aisyah, S (2017), "Effectiveness of Perineal Massage in Preventing Perineal Laceration and Episiotomy in Normal Childbirth at BPM Sri Wahyuni Surabaya", Midwiferia: Jurnal Kebidanan, Vol.3, No.1.
- Mariati, et al (2023), "The Effect of Effleurage Massage Technique on Reducing Pain Scale in the First Stage of Active Labor in the Tampang Tumbang Health Center Area, Central Kalimantan", STIKes Ngudia Husada Madura, Vol 14 No 4.
- Rahmawati, MA & Sayuti (2023), "The Effect of Newborn Weight on the Incidence of Perineal Rupture in Normal Delivery at TPMB Eni Musfirotun, Pendem Village, Junrejo District, Batu City" Indonesian Journal of Health Development Vol.5 No.1, Pages 17-23.
- Togatorop, ME. (2019). "Perineal Massage Technique in the Preparation Process for Primigravida Childbirth for Mrs. B G1P0A0 at PMB Elisabeth Maruliana, Amd. Keb, Penengahan District, South Lampung 2019". Final Project. Tanjungkarang Health Polytechnic, D III Midwifery Study Program, Tanjungkarang.
- Yuliyanti, et al (2021), "Effectiveness of Perineal Massage in Primigravida Mothers Against Perineal Tears in the Selakau Health Center Area, Sambas Regency", Khatulistiwa Midwifery Journal, Volume 7 Number 1, January 2021, pp. 27-32