p-ISSN: 2089-6778
e-ISSN: 2549-5054

THE CORRELATION OF BIRTH WEIGHT WITH INCIDENCE OF RUPTURE PERINEUM AT PRIVATE PRACTICE OF MIDWIVES IN EAST JAKARTA

Okta Zenita Siti Fatimah[1)], Dewi Suri Damayanti[2)], Seventina Nurul Hidayah[3)]
Email: okta.zenita@gmail.com[1)], dewi.suri.damayanti@gmail.com, seventinanurulhidayah@gmail.com
[1, 2)]Midwifery Program, Health Faculty, MH Thamrin University
[3)]Midwifery Program of Polytechnic Harapan Bersama

ARTICLE INFORMATION

Received:
February 10, 2021

Revised:
June 13, 2021

Accepted:
June 18, 2021

Available Online:
June 30, 2021

Abstract

In the process of spontaneous delivery, there was a risk of bleeding due to perineal rupture. The perineal rupture that did not handle properly would increase the risk of infection. The purpose of the study was *to* determine the relationship between perineal rupture with newborn birth weight. The research method used a cross-sectional quantitative method. In this study, the population was mothers who gave birth in January-September 2020 in the private practice of midwives in East Jakarta and obtained 389 people. The number of respondents in this study was 169 respondents. Data collection used primary data by filling out a google form. Collected data analyzed using univariate and bivariate analysis (Chi-Square test). This study showed that respondents who experienced perineal rupture during delivery were 94.7%, and 94.1% of them gave birth to average baby birth weight. The results of statistical tests with chi-square obtained a p-value of 0.081 which means there is no significant relationship between newborn weight and perineal rupture. Recommendations for health workers, especially midwives, need to increase their knowledge and skills through training and health seminars, especially on preventing perineal rupture during childbirth and applying perineal massage techniques following standard operating procedures to provide counseling and training. *Further research needs to be carried out to analyze the incidence of perineal rupture during delivery to reduce the incidence of perineal rupture.*

Keywords: perineal rupture, birth weigth

Correspondence:
Okta Zenita Siti Fatimah, Midwifery Program, Health Faculty, MH Thamrin University
okta.zenita@gmail.com

1. Introduction

Perineal rupture is the second cause of hemorrhage after uterine atony, which occurs almost in the first delivery and not infrequently in subsequent deliveries.[1] A primipara or a person who has given birth for the first time usually experiences perineum tension, resulting in a tear at the front edge. The tear is mostly a minor rupture, but sometimes it could become extensive and dangerous. [2]

Perineal rupture can cause hemorrhage; in the first or second-degree perineal lacerations, it is rare to cause hemorrhage. However, third or fourth-degree perineal lacerations usually become the cause of postpartum hemorrhage.[3] Perineal rupture needs to

p-ISSN: 2089-6778
e-ISSN: 2549-5054

attend because it can cause female reproductive organ dysfunction, the source of hemorrhage, infection, and can cause death due to hemorrhage or sepsis.[4]

Factors causing perineal factors are maternal factors (parity, pushing), fetal factors (birth weight, facial presentation, forehead presentation, breech presentation), vaginal delivery with action (vacuum extraction, forceps extraction, embryotomy) precipitates parturition, and birth attendant. [5] Research by the Bandung Research and Development Center in 2009-2010 in Indonesia found that one in five maternity mothers who experience perineal rupture could die. [6] Data in 2014 (July to December) there were 152 cases of vaginal delivery which the 86 cases (56.5%) were with perineal rupture due to precipitated parturition, unable in pushing, edema and perineum fragility) and fetus factors (large baby and breech presentation).[7] It illustrated the high incidence of perineal rupture in the Health Community Center of Pasar Minggu influenced by various factors.[8] The research was to determine the relationship between birth weight and the incidence of perineal rupture.

2. Method

The research method used a cross-sectional quantitative method. The population in this study were mothers who gave birth in January-September 2020 in the private practice of midwives in East Jakarta who provided perineal massage services, and the population was 389 people. The sample was taken by taking into account the inclusion and exclusion criteria; the inclusion criteria were the respondents had a match between the data provided by the patient in the google form and the data in the medical record. The exclusion criteria were mothers who did not fill in their data in the google form even though they were given a reminder three times. There were 181 mothers who fill in the questionnaire via a google form. After cleaning the data, it was found that 1 data was included in the exclusion criteria and 11 duplicate data; therefore, we obtained 169 mothers as respondents.

The primary data in this research was data of birth weight filled out by respondents via a google form. The secondary data taken was data on the degree of perineal laceration obtained from medical records.[9]

The data obtained were analyzed using univariate analysis to determine the frequency distribution, while hypothesis testing was carried out by bivariate analysis. [10] According to the provisions of data analysis in this study, the statistical relationship test used was chi-Square because the two variables tested were categorical. [11]

3. Results and Discussion

Table 1. Distribution of Perineal Rupture at Private Practice of Midwives in East Jakarta

Perineal Rupture	f	%
No Rupture	9	5.3
Rupture	160	94.7
Total	169	100

Table 1 shows the majority of respondents experienced perineal rupture, namely 160 people (94.7%)

Table 2. Distribution of Birth Weight at Private Practice of Midwives in East Jakarta

Birth Weight	f	%
Low Birth Weight	10	5.9
Average Birth Weight	159	94.1
Total	169	100

Table 2 shows that most respondents gave birth to their babies with average birth weight, namely 159 people (94.1%).

DOI: 10.30591/siklus.v10i2.2427

p-ISSN: 2089-6778
e-ISSN: 2549-5054

Table 3. Cross Table of Birth Weight and The Incidence of Perineal Rupture at Private Practice of Midwives in East Jakarta

Birth Weight	Perineal Rupture				Total	
	No Rupture		Rupture			
	n	%	n	%	n	%
LBW	0	0	10	100	10	100
Average	9	5.7	150	94.3	159	100
Total	9	5.3	160	94.7	169	100

Table 3 shows that respondents who experienced perineal rupture, ten respondents gave birth to LBW babies, and 150 respondents gave birth to babies with average weight. Respondents who did not experience rupture are nine respondents (5.3%) who gave birth to average-weight babies.

Univariate analysis shows that respondents who experienced perineal rupture were 94.7% and statistically show a p-value of 0.081 which means there is no significant relationship between birth weight and perineal rupture. It means that mothers who give birth to large babies do not always experience perineal rupture and vice versa. Suryani's previous research in July-August 2011 showed that most spontaneous delivery (71%) at Atiah Maternity Hospital Jambi were experiencing perineal rupture.[12] This high incidence can be caused by several factors, both from the fetus and the mother. [13]

The results show that the incidence of perineal rupture is found in deliveries with LBW and normal babies. This finding is in accordance with Singalingging and Sikumbang's study, showing no significant relationship between birth weight and perineal rupture. It can happen because the perineum elasticity for each mother is different so that the baby's birth weight did not affect the incidence of perineal rupture.[14] The incidence of perineal rupture can also be caused by other factors, both maternal and fetal factors. [15]

4. Conclusion

This study concludes that most respondents (94.7%) experienced perineal rupture; this happens due to several factors, both fetal and maternal factors. The relationship test showed no significant relationship between birth weight and perineal rupture (p-value: 0.081), which means that even though the baby's weight is large, the mother does not necessarily experience a perineal rupture.

Further research needs to be carried out with the same characteristics of the respondents but with different research designs and variables to dig deeper into the incidence of perineal rupture during childbirth to reduce the incidence of perineal rupture.

5. Acknowledgement

Our gratitude to all parties who helped this research, to the Research Institute and Community Service of MH Thamrin University, and the Private Practice of Midwives in East Jakarta.

6. References

1. Prawirohardjo, Sarwono. Ilmu Kebidanan. PT. Bina Pustaka. Jakarta. (2014). Hal 982
2. Mochtar, Rustam. Sinopsis Obstetri. EGC .Jakarta. (2011).
3. Nurjasmi, Emi dkk. Buku Acuan Midwifery Update 2016. Pengurus Pusat Ikatan Bidan Indonesia. Jakarta. (2016). Hal 79 – 82
4. Mochtar, Rustam. Sinopsis Obstetri. EGC .Jakarta. (2011).
5. Hastono, SP. *Analisis Data Pada Bidang Kesehatan.* Rajawali Pers. Jakarta. (2017)
6. Choirunissa, R., Suprihatin, S., & Han, H. Pengaruh Pijat Perineum Terhadap Kejadian Ruptur Perineum Pada Ibu Bersalin Primipara Di Bpm Ny "I" Cipageran Cimahi Utara Kota Cimahi Jawa Barat. In *Jurnal Ilmiah Kesehatan* (Vol. 11, Issue 2). (2019). doi : https://doi.org/10.37012/jik.v11i2.77

p-ISSN: 2089-6778
e-ISSN: 2549-5054

7. Anggraini, Y., & Martini, D.). Pada Ibu Bersalin Primipara Di Bpm Kecamatan Metro. Jurnal Kesehatan, VI(2), (2015). 155–159. Retrieve from : https://ejurnal.poltekkes-tjk.ac.id/index.php/JK/article/view/99
8. Wiknjosastro, Hanifa. Ilmu Kandungan. Edisi 2. EGC. Jakarta. (2008).
9. Marhamah, M. 'Faktor-Faktor Yang Berhubungan dengan Kejadian Rupture Perineum pada Persalinan Pervagina di Puskesmas Kecamatan Pasar Minggu Jakarta Selatan. Seminar Nasional Mullti Displin Ilmu, V(November), (2017). 473–481. Retrieve from : http://conference.raharja.ac.id/index.php/snmdi1/snmdi1/paper/view/99/108
10. Prawitasari, E., Yugistyowati, A., & Kartika Sari, D. Penyebab Terjadinya Ruptur Perineum pada Persalinan Normal di RSUD Muntilan Kabupaten Magelang. Jurnal Ners Dan Kebidanan Indonesia, 3(2), (2016).77. doi : https://doi.org/10.21927/jnki.2015.3(2).77-81
11. Ismail, Khaled M.K. Perineal Trauma at Childbirth. Springer. Switzerland. (2016). Hal 89
12. Suryani. Perineum Pada Persalinan Normal. 278 Jurnal Kesehatan, IV(Faktor-Faktor Yang Berhubungan Dengan Ruptur Perineum Pada Persalinan Normal), (2013). 277– 283. Retrieve from : https://ejurnal.poltekkes-tjk.ac.id/index.php/JK/article/view/12
13. Juwita, S & Prisusanti R.D. Asuhan Neonatus. Pasuruan, Qiara Media. Jawa Timur. (2020). Hal 2-3
14. Sigalingging, M., & Sikumbang, S. R. Faktor yang Berhubungan dengan Terjadinya Rupture Perineum Pada Ibu Bersalin di RSU Imelda Pekerja Indonesia Medan. Jurnal Bidan Komunitas, 1(3), (2018). 161. Doi : https://doi.org/10.33085/jbk.v1i3.3984
15. Rochmayanti,Sinta Nur, dkk. *Pijat* Perineum *Selama Kehamilan terhadap Kejadian Ruptur*. Jakad Media Publishing. . Surabaya: (2019). Hal 6