

FACTORS ASSOCIATED WITH PERINEAL RUPTURE IN WOMEN GIVING BIRTH AT THE CILANDAK DISTRICT HEALTH CENTER IN 2023

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ABSTRACT

There is still a high incidence of perineal rupture in women giving birth at the Cilandak District Health Center in 2022, amounting to 80.27%, which results in maternal death, therefore researchers are interested in knowing more about the extent to which perineal rupture occurs in birthing women at the Cilandak District Health Center, South Jakarta. The aim of this study was to determine the factors associated with perineal rupture in women giving birth at the Cilandak District Health Center in 2023. This study used an analytical cross-sectional design with a research sample of 203 people who experienced perineal rupture. Research results: it was found that the most perineal ruptures were in grade 2 at 83%, based on maternal age at 20 - 35 years it was 93%, those who did not experience an episiotomy was 87%, based on birth weight ≥ 2500 grams it was 95%. There is a significant relationship in all variables with perineal rupture in mothers giving birth, namely Age (P value = 0.017 with OR of 0.199), episiotomy (P value = 0.002 with OR 3.217), Birth Weight (P value = 0.001 with OR 0.163), Parity (P value = 0.009 with OR 2.143). From the research results, it was found that there was a significant relationship between perineal rupture and maternal age, episiotomy, birth weight, and parity at the Cilandak District Health Center, South Jakarta in 2023. Midwives need to further increase the provision of education and motivation for mothers to do pregnancy exercises to prevent rupture uterus.

Keywords: *Perineal Rupture, Maternity Mother*

INTRODUCTION

Maternal Mortality Rate (MMR) is an important indicator in determining the level of public health. One of the main priorities in developing the health sector as stated in Propenas and the Making Pregnancy Safer (MPS) strategy or safe pregnancy as a continuation of the Safe Motherhood program with the aim of accelerating the reduction in morbidity and mortality of mothers and newborns (MDG's, 2019), Mortality Motherhood has become an international concern. The World Health Organization (WHO)

estimates that worldwide, more than 585,000 mothers die each year while pregnant or giving birth. (Prawirohardjo, 2020)

One of the causes of maternal morbidity and mortality is infection during the postpartum period where the infection begins with perineal rupture. Perineal rupture can occur due to spontaneous rupture or perineal episiotomy which is carried out for indications including: large baby, stiff perineum, misaligned delivery, delivery using either forceps or vacuum. Because if an episiotomy is not carried out according to indications in circumstances where it does not need to be carried out with the above indications, it will cause an increase in the incidence and severity of damage to the perineal area (Prawirohardjo, 2020).

Throughout the world in 2019 there were 2.7 million cases of perineal rupture in mothers giving birth. This figure is estimated to reach 6.3 million in 2050, in line with the increasing number of midwives who do not know midwifery care properly (Prawirohardjo, 2020).

In America, 26 million mothers in labor experienced perineal rupture, 40% of whom experienced perineal rupture (Heimbürger, in <http://stikes Harapanmama.blogspot.com>, 2019). In Asia, perineal rupture is also quite a problem in society, 50% of perineal rupture incidents in the world occur in Asia (Prawirohardjo, 2020).

The prevalence of women in labor experiencing perineal rupture in Indonesia in the 25-30 year age group is 24%, while in birth mothers aged 32-39 years it is 62% (Wiknjastro, 2015). The impact of perineal rupture in the mother includes infection in the suture wound which can spread to the bladder canal or birth canal which can result in complications of bladder infection or infection in the birth canal. Apart from that, bleeding can also occur due to open blood vessels that do not close completely so that bleeding occurs continuously. Slow handling of complications can cause death in post-partum mothers considering that the physical condition of post-partum mothers is still weak. (<http://www.bascommetro.com/2011/12/seputar-rupture-perineum.html>)

Perineal tears occur in almost all first deliveries and are not uncommon in subsequent deliveries. However, this can be avoided or reduced by taking care not to let the fetal head pass through the pelvic floor quickly. And perineal tears are divided into: grade 1, 2, 3, and 4 perineal tears (Rukiyah, 2019). According to data obtained from the Cilandak District Health Center, in 2021 the incidence of perineal rupture was 557 (79.45%) cases from 701 mothers giving birth, and in 2022 the incidence of perineal rupture was 574 (80.27%) cases from 715 mothers giving birth. Therefore, researchers are interested in knowing more about the extent to which perineal rupture occurs in women giving birth at the Cilandak District Health Center, South Jakarta.

METHOD

This research uses quantitative methods with a cross sectional approach. This research was carried out at the Cilandak District Health Center, South Jakarta in the VK section / maternity room. Data collection time will be carried out in March 2023.

The sample in this study was 203 women in labor who experienced perineal rupture at the Cilandak District Health Center, South Jakarta. The sample size was taken based on a sampling formula using a random sampling technique. Univariate data analysis was carried out to determine the proportion and frequency distribution of each variable, while bivariate analysis was carried out to see the relationship between independent and dependent variables using chi square.

RESULTS AND DISCUSSION

1. Univariate Analysis

Table 1. Frequency Distribution of Perineal Rupture, Age, Episiotomy, Birth Weight, Maternal Parity at Cilandak District Health Center in 2023

| Variables | Total (203) | Percentage (100%) |
|------------------------------|-------------|-------------------|
| Perineal Rupture | | |
| Degree 1 | 34 | 17 |
| Degree 2 | 169 | 83 |
| Age | | |
| <20 years | 55 | 9 |
| 20-35 years | 15 | 84 |
| >35 years | 14 | 7 |
| Episiotomy Procedures | | |
| Yes | 26 | 13 |
| No | 177 | 87 |
| Birth Weight | | |
| <2500 grams | 10 | 5 |
| >2500 grams | 193 | 95 |
| Paritas | | |
| Primipara | 61 | 36 |
| Multipara | 9 | 61 |
| Grandemulti | 6 | 3 |

From table 1, in the frequency distribution it can be seen that of the 203 mothers who experienced 2nd Degree Perineal Rupture, the most frequently occurred in 169 respondents (83%), according to age, the most frequently occurred in those aged 20-35 years, 171 respondents (84%), Those who did not have an episiotomy were 177 respondents (87%), birth weight <2500 grams were 193 respondents (95%), multipara were 124 respondents (61%).

2. Bivariate analysis

Table 2. Relationship between Age, Episiotomy, Baby's Birth Weight, Parity, and Perineal Rupture in Mothers Giving Birth at the Cilandak District Health Center in 2023

| Variables | Perineal Rupture | | Total (%) | P Value | OR CI 95% |
|-----------------------------|------------------|--------------|-----------|---------|-------------------------|
| | Degree 1 (%) | Degree 2 (%) | | | |
| Age | | | | | |
| < 20 years | 4(12) | 14(8) | 18(100) | 0.017 | 0,199(1,51 2-13,242) |
| 20-35 years | 21(62) | 150(89) | 171(100) | | |
| > 35 years | 9(26) | 5(3) | 14(100) | | |
| Episiotomy Prosedure | | | | | |
| Yes | 2(1) | 26(15) | 28 (100) | 0.002 | 3,217(2,32 -17,992) |
| No | 32(99) | 143(85) | 177(100) | | |
| Birth Weight | | | | | |
| <2500 grams | 3(9) | 7 (4) | 10 (100) | 0.001 | 0,163(1,51 3-23,419) |
| >2500 grams | 31(91) | 162 (96) | 193 (100) | | |
| Paritas | | | | | |
| Primipara | 11(32) | 62 (37) | 73 (100) | 0,008 | 2,143(2,44 4-12,119) |
| Multipara | 21 (62) | 103 (61) | 124 (100) | | |
| Grandemulti | 2 (6) | 4 (2) | 6 (100) | | |

From table 2, there is a significant relationship in all variables with perineal rupture in mothers giving birth, namely age (P value = 0.017 with an OR of 0.199), episiotomy (P value = 0.002 with an OR of 3.217), birth weight (P value = 0.001 with OR 0.163), Parity (P value = 0.009 with OR 2.143).

From the research results, it was found that the factors that most influenced perineal rupture in women giving birth were grade 2 perineal rupture, 169 people (83%) and grade 1, 34 people (17%). The reason why grade 2 perineal ruptures are more common than grade 1 perineal ruptures is because the baby's head is too pressing and is also influenced by the mother's condition.

Based on the results of the Chi Square test, there is a relationship between perineal rupture and maternal age. According to the Indonesian Ministry of Health (2020), the age considered optimal for reproduction is between 20 – 35 years. A stiff perineum inhibits the second stage of labor, which increases the risk of death for the fetus, and causes extensive damage to the birth canal. This situation

can be found in primigravidas who are more than 35 years old, who are commonly called old primigravidas (Winkjosastro, 2015).

According to research by Emiolina (2010), the results of the study found that there were still many mothers who gave birth in the age group of less than 20 years with perineal rupture. This happens because the woman's reproductive organs are immature and unable to produce properly, resulting in perineal tears. This is in accordance with the theory put forward by Soeleman M, 1993 which states that the age of 20 - 35 years is the productive age and it is hoped that women are mature or capable of producing. However, in the age group 20 – 35 years and in the age group over 35 years, perineal tears are still found, even though according to Soeleman at this age they are already capable of production. This is in accordance with the theory where it all comes back to the condition of the mother and fetus during childbirth (Mochtar, 2022).

The author assumes that there is conformity between the research results and theory because from the research results obtained by the author, there are many perineal ruptures occurring at the age of mothers 20 - 35 years, but at mothers aged < 20 years there are also more perineal ruptures compared to mothers aged > 35 years. , where there were many mothers aged 20 – 35 years who gave birth at the research site.

Based on the results of the Chi Square test, it was concluded that there was a relationship between perineal rupture and episiotomy. According to Wiknjosastro (2015) it is recommended to perform an episiotomy on primigravidas or women with a stiff perineum. This episiotomy is performed when the perineum has thinned and the fetal head does not re-enter the vagina. The author assumes that there is conformity between the research results and theory because from the results of the author's research, the number of mothers who gave birth did not experience an episiotomy compared to mothers who experienced an episiotomy. This action was carried out to reduce pressure on the fetal head, so as not to cause total rupture in the mother's perineum.

Based on the results of the Chi Square test, it was concluded that there was a relationship between perineal rupture and birth weight. According to Varney (2007), fetal body size is in grams, the normal fetal weight is 2500 - 4000 grams, whereas according to Wiknjosastro (2015), the baby's weight which usually causes perineal tears is the fetus or baby which is usually large, namely >4000 grams. Babies with a large body weight are at risk of vaginal birth trauma such as shoulder dystocia and soft tissue damage to the mother. According to research by Enggar (2010), it was found that in the group of mothers who gave birth with a birth weight of 2500 - 3000 grams and 3000 - 3500 grams, more people experienced perineal rupture than those who did not experience rupture. This shows that birth weight has an influence on the occurrence of perineal rupture in normal delivery. The author

assumes that there is conformity between the research results and existing theory, because from the results of the author's research, it was found that mothers who gave birth weighed ≥ 2500 grams more, where this rupture could occur because the mother gave birth with a baby whose weight was greater than before.

Based on the results of the Chi Square test, it was found that there was a relationship between perineal rupture and parity. According to Mochtar's theory (2022), whether in primi, multi or grande multipara, tears can occur in the perineum. Especially in primi gravida, usually on examination the perineum shows signs of a closed vulva, perforated hymen, narrow vagina with rugae. During labor, there will be pressure on the soft birth canal by the fetal head with the perineum still intact, in the primi, perineal tears will easily occur. However, this is again seen from the condition of the mother and fetus during delivery. According to research by Emialoina (2010), mothers who gave birth experienced perineal rupture in their first child. This is in accordance with the theory which states that when examining primigravidas, signs of a closed perineum on the vulva, perforated hymen, narrow vagina with rugae are found. And during labor there will be pressure on the soft birth canal by the head of the fetus with the perineum still intact in the primi, perineal tears will easily occur (Mochtar, 2022) but it is also often found in groups of mothers who give birth to their second to fourth or even more than four children. who had a perineal tear. The author assumes that there is conformity between the research results and existing theory, because from the results of the author's research, it was found that more multiparous mothers experienced perineal rupture than primiparous mothers, where the researchers found that multiparous mothers were more likely to give birth in that place.

CONCLUSION

The results of this study are: perineal rupture in women giving birth was mostly in grade 2, 169 people (83%), the most common was at the age of 20-35 years, 161 people (84%) out of 203 respondents, most did not experience an episiotomy. as many as 177 respondents (87%). Most often occurs at birth weight 2500 – 4000 grams as many as 190 respondents (94%). Most often it occurs in multiparas, 124 respondents (61%) and 100% of mothers who experience perineal rupture experience spontaneous labor. There is a relationship between age, episiotomy, birth weight and parity with perineal rupture. Suggestions from this research are every health workers are expected to be better

able to provide education regarding pregnancy exercises, especially in the second trimester, so as to make the perineum elastic and reduce the occurrence of tears in the perineum during childbirth.

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