

FACTORS AFFECTING THE OCCURRENCE OF PERINEAL RUPTURE IN NORMAL DELIVERY MOTHERS AT BPM MIDWIFE NUR MUHIBBAH ACEH SINGKIL 2019

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ABSTRACT

Factors affecting the occurrence of perineal rupture in normal delivery mothers at BPM midwife Nur Muhibbah. (World Health Organisation) defines maternal death as death that occurs during pregnancy or death within 42 days post pregnancy or abortion without regard to the duration or place of delivery due to or exacerbated due to pregnancy itself or its management, laceration of the birth canal, one of which is rupture of the perineum which can occur almost every vaginal delivery but is not caused by accident or other causes not related to pregnancy. It is estimated that 60% of maternal deaths due to pregnancy occur after delivery and 50% of deaths occur within the first 24 hours. Regular monitoring during childbirth can prevent maternal and neonatal mortality and morbidity. On this basis, efforts to improve maternal and neonatal health become very strategic for efforts to develop quality human resources (WHO, 2014). The purpose of this study was to determine the relationship of newborn weight and parity with perineal rupture. The method used is observational analytic with cross sectional design. Total population of 32 respondents with a sample of 32 normal maternal respondents. Sampling in total sampling using analysis observation sheets used is univariate and bivariate analysis. The results of this study illustrate that multipara as many as 65.7% of respondents occurred perineal rupture in most multipara and newborn body weight $0.003 < 0.005$ based on this study it can be concluded that perineum rupture, there are still a lot of at-risk mothers, multipara and newborn weight born > 4000 grams.

Keywords: Perineal rupture, newborn weight and parity

INTRODUCTION

World Health Organisation defines maternal death is death that occurs during pregnancy or death within 42 days post pregnancy or abortion without regard to the duration or place of delivery caused or aggravated by the pregnancy itself or its management, but not due to an accident or other cause not related to pregnancy.

It is estimated that 60% of maternal deaths due to pregnancy occur after delivery and 50% of deaths occur within the first 24 hours. Regular monitoring during childbirth can prevent maternal and neonatal mortality and morbidity. On this basis, efforts to improve maternal and neonatal health become very strategic for efforts to develop quality human resources (WHO, 2014).

Sustainable Development Goals (SDG's) targets are to reduce maternal mortality to below 70 per 100,000 live

births by 2030, requiring ongoing commitment and effort in 2011, There are 5 countries that have a maternal mortality rate (MMR) of 15-199 per 100,000 live births, namely Brunei Darussalam (24), the Philippines (99), Malaysia (29), Vietnam (59), and Thailand (48) and 4 countries have a MMR of 200-499 per 100,000 live births, including Indonesia, "AKI in Indonesia in 2012 amounted to 359 per 100,000 live births, this shows that maternal mortality rates in Indonesia are relatively high compared to the Philippines, Vietnam and Thailand. (Indonesia Health Profile, 2016).

According to WHO (2014), the maternal mortality rate (MMR) in the world is 289,000 people, Southeast Asia has 16,000 lives, while the maternal mortality rate of Indonesia is 214 per 100,000 live births, one of the causes of MMR in Indonesia is bleeding (30, 3%),

Hypertension in Pregnancy (HDK) (27.1%), infection (7.3%) Partition Loss (1.8%) and Abortion (1.6%), bleeding can occur during labor. (WHO, 2014). Maternal death is the death of a woman during pregnancy, childbirth or within 42 days after the end of pregnancy. The case of maternal mortality in Indonesia is still quite high. The main cause of maternal death in Indonesia is postpartum hemorrhage. Based on the cause of bleeding, tear of the birth canal is the third cause of bleeding after uterine atony, placental retention. (Mokhtar, 2012)

Maternal health is a measure of community welfare. Maternal mortality is the death of a woman during pregnancy, childbirth or within 42 days after the end of pregnancy, the case of maternal mortality in Indonesia is still quite high. In 2015 the maternal mortality rate is targeted to decrease to 103 per 100,000 births (RI Ministry of Health, 2013). The government has launched a safe mother hood initiative to secure pregnant women, give birth and afterward to a healthy and prosperous family (Sarwono, 2010).

The most important hemorrhage is a direct cause of maternal death in Indonesia is postpartum warning, uterine atony is the first hemorrhage that occurs in almost all first childbirths and not infrequently in subsequent deliveries Postpartum hemorrhage caused by perineal tears is the second cause of bleeding, tear of the birth canal also causes discomfort in the puerperal period that is giving pain to the suture marks and can also interferes with mobilization from postpartum mothers, the risk of infection can also occur in perineal wounds if the home care is not appropriate (Mokhtar 2012).

From the results of a research journal conducted by Fritria Dwi Anggraini, entitled Relationship of baby's birth weight with perineal tears in physiological labor in RB Lilik Tahun, it was concluded that labor often resulted in birth canal injury or what is called perineal rupture, the birth weight of the baby affects the stretching of the perineum However, perineal rupture still

occurs even if the baby is born not too big. The purpose of this study was to analyze the relationship of newborn body weight with perineal tears in physiological labor in RB Lilik (Fritria, 2016).

Data on the incidence of tears perineum in maternity worldwide there are 2.7 million cases and is expected to reach 6.3 million cases in 2050, in America of 26 million maternity there are 40% experiencing rupture. In Asia, there are quite a lot of perineal tears because 50% of the world's perineal tears occur in Asia. The prevalence of maternal women who experience perineal tears in Indonesia in the age group of 25-35 years is 24% of all deliveries at that age and 62% of all women aged 32-39 years (Fethus, 2014). AKI is one indicator of the success of health development. This indicator is not only able to assess maternal health programs, moreover it is able to assess the degree of public health because of its sensitivity to improving health services, both in terms of accessibility and quality. When viewed from the distribution sourced from the Aceh district / city health office, it is known that the number of maternal deaths reported was 149 cases and 103,931 live births, then the ratio of maternal mortality in Aceh in 2017 again showed a decrease to 143 per 100,000 lives. The regions that contributed the most to maternal deaths were East Aceh District which reached 20 cases, followed by North Aceh District with 18 cases and Pidie District with 15 cases and other districts / cities where the number of maternal deaths was between 1 and 11 cases. In 2017 the city of Sabang succeeded in suppressing the maternal mortality rate, this shows the high commitment of the local government in providing health services for pregnant women, birth mothers, and postpartum mothers (Aceh Health Profile, 2017).

From 23 districts / cities in Aceh, Aceh Tamiang district tends to be able to reduce the number of maternal deaths from 10 cases in 2015 to 9 in 2016 and again dropped to 5 cases in 2017. Followed by the

middle of Aceh district, from 7 cases dropped to 5 again dropped to 3 in 2017. As for the increase in cases occurred in West Aceh district from 3 cases in 2015 increased to 6 cases and continued to rise to 9 cases in 2017, followed by Aceh Singkil district from 6 cases in 2015 continued to increase reaching 11 cases in 2017, and South Aceh district from 2 cases in 2015 continued to rise to 6 cases in 2017. The proportion of maternal deaths was dominated by postpartum maternal deaths 73 cases (49%), followed by maternal mortality by 40 cases (27 %) and maternal deaths in pregnancy as many as 36 cases (24%) (Aceh Health Profile, 2017).

RESULTS AND DISCUSSION

Univariate analysis was carried out to see the description of the frequency distribution of respondents based on the variables studied, namely maternal age, parity, method of delivery and birth weight. Variables, namely age, parity, and birth weight, can be seen in the frequency distribution table below :

Table 1. Frequency distribution of the occurrence of perineal rupture in vaginal delivery based on the age of the maternity at the Midwife Nur Muhibbah Clinic in Aceh Singkil in 2019

My mother's age	Frekuensi	Presentase (%)
19-25 tahun	18	51,4
26-30 tahun	8	22,9
31-40 tahun	7	20,0
41-50 tahun	2	5,7
Total	35	100

Based on table-1, it was known that there were 18 women (51.4%) aged 26-25 years old who were 26-30 years old (22.9%), who were aged 31-40 years old, as many as 7 people (20 , 0%), and those aged 41-50 years were 2 people (5.7%).

Table 2. Frequency distribution of the occurrence of perineal rupture in vaginal delivery based on maternal parity in the Midwife Nur Muhibbah Clinic Aceh Singkil in 2019

Paritas	Frekuensi	Presentase (%)
Primipara	9	25,7
Multi para	23	65,7
Grande Multi para	3	8,6
Total	35	100

Based on Table-2, it is known that maternal parity with Primipara as many as 9 people (25.7%), while multipara as many as 23 people (65.7), and grandemultipara as many as 3 people (8.6%).

Table 3. Frequency distribution of the occurrence of perineal rupture in vaginal delivery based on how to infect maternity mothers at the Nur Muhibbah Aceh Singkil Midwife Clinic in 2019.

How to Manage Mothers	Frekuensi	Presentase (%)
right	16	45,7
No true	19	54,3
Total	35	100

Based on Table-3 known that there were 19 people (54.3%) who gave them incorrectly, while those who did correctly were 16 (45.7%). mother gave birth at the clinic Nur muhibbah Aceh Singkil in 2019

Birth Weight Baby	Frekuensi	Presentase (%)
2500-3000	11	31,4
3000-4000	22	62,9
>4000	2	5,7
Total	35	100

Based on Table-4, it is known that there are 11 people who have birth weight babies at birth 2500-3000 grams as many as 11 people (31.4%), while those who have

birth weight of 3000-4000 grams are 22 people (62.9%). And > 4000 grams of 2 people (5.7%).

Table 5. Frequency distribution of respondents based on the incidence of spontaneous perineal rupture in the Midwifery Nur Muhibbah Clinic in

Perineal ruptur	Frekuensi	Presentase
Ruptur	26	74,3
Tidak ada Ruptur Perineum	9	25,7
Total	35	100

Based on Table-5 it was found that 26 women (74.3%) had perineal rupture (74.3%), while 9 (25.7%) did not experience perineum rupture.

Bivariate analysis

Bivariate analysis aims to find out between the independent variable and the dependent variable using the cho square test, to find out the significant relationship between each independent variable and the dependent variable. Chi square test was performed using SPSS software with a 5% significance level (95% confidence level). Basic decision making with a 95% confidence level.

DISCUSSION

1. Relationship between maternal age and the occurrence of perineal rupture in Normal labor

Based on table 7, it is known that the Asymp (2-sided) value in the Pearson chi square test is known to be 0.84. Due to the Asymp value (2-sided) $0.084 > 0.005$, then based on the decision-making basis above, it can be seen that H_a is accepted and H_0 is rejected. Then it can be seen that "there is no significant relationship between maternal age with perineal rupture"

The results of this study are in line with research conducted by (Stella, 2015) there is no significant relationship between maternal age with perineal rupture. Women who are <20 years old or > 35 years old are

at risk of perineal rupture due to the age of <20 years, a woman's reproductive function is not perfect. Whereas at the age of > 35 years a woman's reproductive function has decreased compared to normal reproductive function so that the possibility for post-bleeding complications will be greater (Winkjosastro, 2012).

The government recommends that couples of childbearing age (PUS) should give birth in the age period of 20-35 years, in that age group the morbidity and mortality (mortality) of mothers and infants that occur due to pregnancy and childbirth are lowest compared to other age groups (BKKBN, 2015).

2. Relationship between parity and the incidence of rupture of the perineum in maternal

Based on table 8, it is known that the Asymp (2-sided) value in the Pearson Chi square test is known to be 0.03. Because the Asymp value (2- sided) $0.003 < 0.005$, then based on the decision-making basis above, it can be seen that H_0 is accepted and H_a is rejected. Then it can be seen that "there is a significant relationship between parity with the occurrence of perineal rupture"

This is in line with research Syriac (2013). Which shows there is a significant relationship between parity and perineal rupture in normal labor. Seen from the occurrence of perineal rupture that occurred in primiparous labor and partly perineal rupture occurred in multiparous labor. The results of this study are also in line with research conducted by Widia (2017) which states that there is a close relationship between parity and the incidence of perineal rupture in the batulicin 1 health center in bamboo regency.

According to Aprilia's theory (2010) it is not always that mothers with little parity (primipara) experience perineal rupture and many parities (multipara and multipara grande) do not experience perineal rupture, because every mother has different levels of perineal elasticity. The more elastic the perineum, the rupture of the perienum is

unlikely. Occurrence of perineal rupture can be prevented or reduced by doing pregnancy exercises or pelvic floor exercises

3. The relationship between how to strike with the occurrence of perineal rupture

Based on table 9 it is known that Asymp (2 sided) in the Chi Square pearson test is known to be 0,000, because the Asymp (2 sided) value is 0,000 <0.05 then based on the conclusions above, it can be seen that there is a significant relationship, H0 is rejected and Ha is accepted. Then it can be seen that there is a relationship between how to strike with the incidence of ruptured perineum in normal delivery mothers.

This is also in line with Safrina's (2013) study of the relationship between striking technique and the occurrence of perineal rupture, showing that there is a relationship between striking technique and the occurrence of perineal rupture in normal delivery, the majority with correct striking technique. The results of this study are in accordance with the theory put forward by Manuaba (2013), suggesting that straining is right by straining in accordance with natural impulses during contractions. In addition, mothers are advised to hold their breath while straining or do not breathe breathlessly. The correct striking technique is when the mother straining does not lift the buttocks.

According to the researchers' assumption that there is a relationship between straining technique and the occurrence of perineal rupture because if the straining technique is straining, perineal rupture can also be more severe than the correct straining technique.

4. The relationship between birth weight and the occurrence of perineal rupture

Based on Table 10 it is known that Asymp (2 sided) in the Pearson Chi Square test is known to be 485, because the Asymp value of 485 > 0.005 then based on the above conclusions, that there is no significant relationship between birth weight with the

occurrence of perineal rupture Ha accepted and H0 rejected This is in accordance with research from Mohammad et al (2011). Which states there is no relationship between the condition of the perineum and birth weight of the baby. Correspondingly, rathfich et al. Mentioned no statistically significant relationship between birth weight, length or head circumference of the baby with perineal rupture. Which has a significant relationship to perineal rupture in the study of Ratfuchs et al. Is the increase in the average age of women during childbirth use of fundal pressure, prolongation of the second stage, early episiotomy, the use of oxytocin and dolatin and the health team that assisted in labor. However, it is different in the results of research conducted by researchers in this study where the factors that influence the occurrence of perineal rupture are the way to strike and parity while there is no significant relationship between birth weight and maternal age.

CONCLUSION

Based on what has been done, it can be concluded that some of the respondents 74.3% of women experienced perineal rupture, 25.7 women did not experience perineal rupture.

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