

THE RELATIONSHIP OF THE WEIGHT OF NEWBORN BABIES AND THE INCIDENT OF PERINEAL RUPTURE IN PRIMIPARA MOTHERS AT MUTIARA BUNDA HOSPITAL

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ABSTRACT

The first cause of bleeding is uterine atony and the second cause is tearing of the birth canal. One of the birth canal tears is a perineal tear. Perineal rupture is an injury to the perineum that occurs due to certain reasons without any tearing or deliberate action. The aim of the research was to determine the relationship between newborn baby weight and the incidence of perineal rupture in primiparous mothers. This research method is analytical research with a cross sectional approach. The population was 86 primiparous mothers who experienced perineal rupture or did not experience perineal rupture. The results of the study showed that the weight of newborn babies in primiparous mothers ranged between 2500-4000 grams (61.6%), 64 mothers experienced perineal rupture (74.4%), primiparous mothers whose babies weighed > 4000 grams experienced perineal rupture. as many as 14 people (100%). The conclusion is that there is a relationship between the weight of newborn babies and the incidence of perineal rupture in primiparous mothers at Mutiara Bunda Hospital.

Keywords: Body Weight; Newborns; Perineal Rupture

INTRODUCTION

The high maternal mortality rate during pregnancy, childbirth and the postpartum period is a long-standing and complex problem that is difficult to overcome in this country (West Java Health Office, 2008). World Health Organization (WHO), in 2008 estimated that as many as 37 million births occurred in the Southeast Asia region every year, while the total maternal deaths in this region were estimated at 170 thousand respectively, as many as 98% of all maternal deaths in this region occurred in India,

Bangladesh, Indonesia, Nepal and Myanmar. Based on the Indonesian MMR is still at 226/100,000 births or every hour 1 (one) mother in labor dies (Ministry of Health, 2009).

The above conditions prompted the Indonesian government to create a national strategy plan for Making Pregnancy Safer (MPS) for 1999-2015, which emphasizes safe motherhood efforts, namely reducing the morbidity and mortality rates of mothers and newborns. The target expected to be achieved in 2015 for the infant mortality rate is to

decrease to 321/100,000 live births while the maternal mortality rate is 307 to 226/100,000 people (Prasetyawati, 2012). The indirect cause of the high maternal mortality rate is related to the handling of bleeding, while the indirect causes include the decision to calculate birth, speed of getting to a medical place during delivery (Wiknjastro, 2020).

Based on data from the World Health Organization (WHO) in 2019, the occurrence of rupture Perineal in maternity there are 2.5 million cases, of which this figure is expected to reach 6.3 million by 2050. In Asia alone, 50% of maternity mothers experience rupture perineum while the results of a study in 2019 in Indonesia found that mothers childbirth experienced perineal rupture of 24%, in East Java Province in 2019 in around 26% of maternity mothers experienced perineal rupture and in Malang City in 2019 It was found that 21% of maternity mothers in Indonesia experienced perineal rupture.

The cause of bleeding is uterine atonia and the second cause of bleeding is a tear of the birth canal which often occurs in almost all first deliveries and not infrequently in subsequent deliveries, there is one of the tears in the birth canal, namely a perineal tear. In a primipara or person who has just given birth for the first time When the event of "head out the door" occurs. At that time, a primipara person is usually unable to withstand strong tension, so it tears on the front edge. The effects are usually mild injuries but sometimes they are also extensive and dangerous. As a result of childbirth, especially tears in the primipara mother, there is usually a wound in the vulva around the vaginal introitus which is usually not deep, but sometimes it can be very deep. (Prawirahardjo, 2009).

Factors that can cause perineal tears are stiff perineum, baby birth weight, head birth that is too fast, primipara mother. The factor that often affects is birth weight where the weight of the baby is weighed in the first 24 hours of birth, if the baby is born is larger, the risk of perineal rupture will also be higher. (Sekartini, 2007)

OBJECTIVE

The aim of this research was to determine the relationship between newborn baby weight and the incidence of perineal rupture in primiparas at Mutiara Bunda Hospital in 2011.

Problem formulation based on the background above then a problem can be formulated In this study, is there Relationship between birth weight with the incidence of perineal rupture in normal childbirth?

The purpose of this study in general is for Knowing the relationship between weights Newborn body with Incidence of perineal rupture in normal delivery. Objectives Especially in this study is To find out the weight of the baby newborn and to know Perineal rupture in labor normal and know the relationship between birth weight and the incidence of perineal rupture in Normal delivery.

Research benefits from This result is expected to be provide scientific information as Subsequent research contributions.

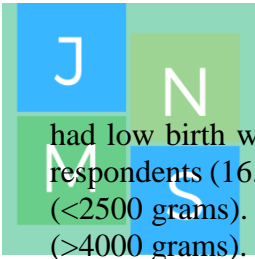
METHODS

Analytical research with a cross sectional approach. epidemiological research which aims to obtain an explanation of the relationship between the weight of newborn babies and the incidence of perineal rupture in primiparous mothers. The population in this study were all primiparous mothers who gave birth normally at the Mutiara Bunda Tasikmalaya Maternity Home. The research sample used total sampling taken from the entire population of primiparous mothers who gave birth at RB Mutiara Bunda in 2011. The data collection technique used secondary data originating from Mutiara Bunda's hospital medical records, the instrument in this research was a checklist sheet. Data analysis used the chi square test.

RESULT

Univariate Analysis Newborn Baby Weight

Based on table 1, it is known that 53 respondents (61.1%) had normal birth weight (2500-4000 grams), 19 respondents (22.1%)



had low birth weight (<2500 grams) and 14 respondents (16.3%) had normal birth weight (<2500 grams). % have a large baby weight (>4000 grams).

53 respondents had a normal birth weight, this was supported by a fairly good level of knowledge about the mother's knowledge about the nutritional intake provided when the mother was pregnant and about economic conditions which were also adequate so that the baby's growth and development process while in the womb was well fulfilled, but this also It is not absolutely a benchmark for a baby's growth to be good, there are many factors that influence it, such as the condition of the baby and the absence of internal disturbances which cause less than optimal absorption of nutrients for the baby's growth and development process in the womb. The condition of a normal baby's weight is a condition that is expected by a husband and wife because the baby is in a healthy condition and the child's nutrition is met.

Low birth weight is usually caused by premature birth, twins, and fetal growth inhibition during the womb. In this situation, complications such as immature lungs often cause respiratory problems. Normal weight. Normal babies do not have much further care The baby gets good nutritional intake during pregnancy so that when born has an ideal weight. Large body weight of > 4000 grams. This condition can be caused by diabetes mellitus, late labor or a history of giving birth to a large baby.

The nutritional status of pregnant women at the time of conception and during pregnancy can affect growth of the fetus conceived. In addition, the nutrition of pregnant women determines the weight of the baby who are born, so monitoring the nutrition of pregnant women is very important. Pregnancy check-up, pregnancy screening aims to recognize and identify problems that arise during pregnancy, so that the health of pregnant women can be maintained and most importantly is the mother and the baby in the womb will be

good and healthy until the time of delivery (Misrina and Silvia, 2022).

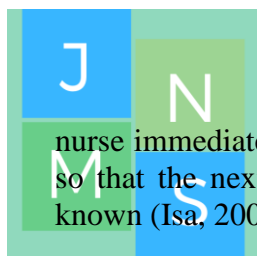
Perineal Rupture Occurrence

Based on table 2, it is known that the majority of respondents experienced perineal rupture, 64 respondents (74.4%) and those who did not experience perineal rupture, 22 respondents (25.6%).

74.4% of mothers experience rupture. This occurs because in mothers who have just given birth for the first time (Primiparous) there are usually many factors including stiffness of the perineum, baby's weight, birth that is too fast and rarely doing cavity muscle exercises so that the birth canal becomes elastic, so that There are many incidents of rupture in mothers who give birth at RB Mutiara Bunda. This is in accordance with what Nolan (2010) wrote that most mothers who want to give birth are afraid of having an episiotomy, but they are also lazy about carrying out pelvic cavity muscle exercises to make the birth process easier so that it is not stiff. Tears occur in the birth canal because during childbirth when the "head goes out the door" at this time a primipara usually cannot withstand this strong tension so tears in the birth canal are difficult to avoid (Prawirahardjo, 2009).

Rupture is likely to occur in all mothers who give birth, perineum rupture occurs intentionally (Episiotomy) to enlarge the vaginal introitus with the aim of helping the birth of the fetus. (Data, 2010). In addition to iu rupture that occurs spontaneously, injuries to the perineum that occur because they are not torn or intentional. Wounds during childbirth and usually irregular wounds (Prawirahardjo, 2009). While the baby is being born, the head or shoulders can tear the cervix, vagina, labia or perineum. Tears can range from small to large, which extend to the rectum. Factors that can cause spontaneous tears include large babies (Sloane, 2009)

Birth weight is the baby's weight that is weighed in the first 24 hours of birth, 6 hours after the baby is born, then bathed and wrapped in appropriate clothes, usually the



nurse immediately weighs the baby's weight so that the next handling technique can be known (Isa, 2008).

Bivariate Analysis

Based on Table 3, it was found that 14 respondents (100%) had babies weighing >4000 grams, that is, all of them had ruptures. 46 respondents (86.8%) who were normal experienced rupture, while then of the 19 respondents who had a baby's weight <2500 grams (low baby weight) there were 4 respondents (21.1%) who experienced a rupture. The results of the bivariate analysis obtained a probability value (p-value) of 0.000 and <0.05, which means there is a significant relationship between the incidence of perineal rupture in primiparous mothers and the weight of newborn babies at RB Mutiara Bunda in 2011.

The results of the study showed that 100% of primiparous mothers (14 people) experienced perineal rupture with a birth weight of >4000 grams. This shows that the risk level for babies who weigh more will increase the risk of perineal rupture. However, in this study it was also found that normal babies whose mothers weighed 2500-4000 grams experienced perineal rupture. There are other factors that cause rupture, including the mother's lack of knowledge about perineal rupture, and mothers being lazy about doing perineal massage during pregnancy, keagle exercises, the benefits are the perineum becomes less rigid. According to (Prawirahardjo, 2009), to reduce the incidence of perineal rupture, pregnant women should massage the perineum so that the birth canal is not stiff, the birth is too fast, the use of forceps or vacuum and miscalculation of birth. In primiparous mothers, it is often found that a stiff birth canal usually causes extensive birth canal damage of around 5-6 cm (Sarwono, 2005). A stiff birth canal will increase the risk of rupture. This condition causes an episiotomy to be carried out to facilitate the birth of the baby so that it does not take too long in the birth canal because it can cause the fetus to

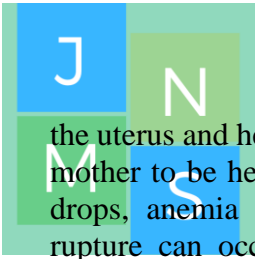
experience asphyxia so that if one mishandles the birthing process, the infant mortality rate will increase. One way to minimize this is Kegel exercises, where these exercises train/strengthen the pelvic floor muscles (*pelvic floor muscles*) but it is also useful for Kegels in pregnant women, namely that it can prevent perineal tears, reduce the possibility of urination problems such as postpartum incontinence, reduce hemorrhoids (hemorrhoids), make the delivery process easier (muscles are strong and controlled) (Sekartini, 2007).

The risk of rupture will be greater if you look at the health conditions of both parents, such as having diabetes mellitus, where this disease causes the baby's weight to increase, large babies will have a higher risk of perineal rupture. This condition occurs because the mother's birth canal cannot accommodate the size of the baby, coupled with mothers giving birth first whose birth canal is stiffer so that tearing events will be greater (Isa, 2008)

Babies with a body weight of 2500-4000 grams showed the result of rupture up to 86.8%, which is the highest value of rupture after the baby's birth weight is 4000 grams. Fetal weight can result in perineal rupture, which is a fetal weight of >3500 grams, this is due to the risk of vaginal partus trauma such as shoulder dystocia and soft tissue damage to the mother. The weight of the newborn is a factor that causes perineal rupture. Large seedlings of babies born are at risk of perineal rupture.

Perineal rupture is experienced by 85% of women who give birth vaginally. Perineal rupture needs attention because it can cause dysfunction of the female reproductive organs, as a source of bleeding or a way in and out of infection, which can then lead to death due to bleeding or sepsis (Champan, 2013)

The risk of a baby's weight can cause birth canal tears and fractures one-step bone in the mother during childbirth (Keintjem, Purwandari, and Lantaa, 2018). Impact caused by perineal rupture such as severe bleeding that can spread to lower segment of



the uterus and heavy bleeding that causes the mother to be helpless, weak, blood pressure drops, anemia and weight drops. Perineal rupture can occur due to the existence of spontaneous rupture and episiotomy. . Perineum performed by episiotomy should be done on indications such as large babies, partus presipitatus, stiff perineum and Abnormal delivery (Maisaroh and Yuliwati, 2019).

The risk of complications that may occur if perineal rupture is not addressed immediately, namely bleeding, fistula, hematoma, infection (Rosdiana, 2013). Primigravida maternity mothers who give birth to babies weighing 2500-4000 grams have a higher risk of perineal rupture compared to babies with a birth weight of < 2500 grams, The mother's rigid perineal factor, the fetal head that quickly passes through the pelvic floor, and the wrong way of straining also increase the risk of perineal rupture. Normal childbirth can result in cases of perineal rupture in primipara and multipara mothers. The mucosal layer and perineal skin in a primipara mother are prone to ruptures that can cause vaginal bleeding (Wiknjosastro, 2020).

In line with the theory (Oxorn, et al. 2010) which states that generally perineal rupture occurs in the primipar, but not infrequently it also occurs in the multipara. Perineal rupture usually occurs in the state of the partus presipitatus, straining too hard, edema and fragility of the perineum, flexibility of the birth canal, and childbirth by action. When viewed from the risk factors, primipara maternity mothers have a higher risk of experiencing perineal rupture compared to multipara maternity mothers, depending on how the helper provides childbirth assistance and maternal care during the delivery process.

Factors that affect perineal tears are a stiff penineum, large baby weight, premature birth, the use of forcep or vacuum, and prmipara (Sarwono, 2005). In line with Hani (2019) which states that the normal birth weight of the baby is between 2500-4000 grams, obtained from the results of weighing

the first 24 hours of birth. The baby's birth weight can affect the process of delivery in stage II, the larger the baby is born will increase the risk of perineal rupture. A large baby is a baby that once born weighs more than 4000 grams.

Fetal factors include birth weight, abnormal head position, forceps extraction difficult ones, shoulder dystocia, and congenital disorders such as hydrocephalus. This happens because of the weight The baby's large body makes it difficult to pass through the pelvis and causes tears perineum in the mother giving birth. In babies with large birth weight, perineal rupture spontaneous can occur when the head and shoulders are born. When passing through the birth path, Weight The baby affects the amount of pressure on the muscles around the perineum so that the perineum protruding and stretching until the baby's head and all parts of the body are born. Bigger pressure on the perineum, the greater the risk of perineal rupture (Wulandari, 2016).

Data shows that 19 (22.1%) < 2500 grams experience rupture. According to Sarwono, this can happen because many factors include a rigid perineum where the falfis floor is inelastic and the surrounding structures occupy the lower pelvic door next to the posterior os cogcigis. Or birth that is too early where at the time of delivery it is not led to strain properly and correctly so that the tear in the perineum cannot withstand strong tension. Another thing is the use of precps or suction devices (Vacum), the use of tools to facilitate the delivery process can result in friction that occurs in the area where the birth occurs. In addition, mothers have just given birth for the first time (primipara).

This research is in line with the research conducted by Irmawati (2014) on the relationship between the baby's weight and the incidence of perineal laceration in the delivery process in The Makasar Health Center, showed that there was a significant relationship between body weight newborns with the incidence of perineal laceration in the labor process. This research is in line with the research conducted by Pangastuti (2016)

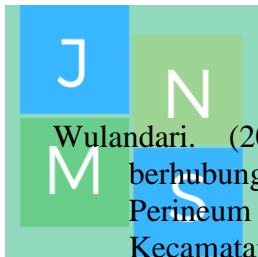
on the relationship between the baby's weight and the incidence of perineal laceration in the delivery process.

CONCLUSION

There is a relationship between baby weight and the incidence of perineal rupture in primiparous mothers at Mutiara Bunda Hospital

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Table 1. Frequency Distribution of Newborn Baby Weight in Primiparous Mothers

Baby's Weight	F	%
<2500 grams (Low)	19	22.1
2500-4000 grams (Normal)	53	61.6
>4000 grams (Big)	14	16.3
Amount	86	100.0

Table 2. Distribution of Perineal Rupture Incidences in Primiparous Mothers

Baby's Weight	F	%
Rupture	64	74.4
Not ruptured	22	25.6
Amount	86	100.0

Table 3. Relationship between baby weight in primiparous mothers and the incidence of perineal rupture at Mutiara Bunda Maternity Home

Heavy Baby Body	Rupture Event				Total	P value	
	Rupture		No Rupture				
	F	%	F	%			
>4000gr	14	100	0	0	14	100	0,000
2500-4000gr	46	86.8	7	13.2	53	100	
<2500gr	4	21.1	15	78.9	19	100	