

# RELATIONSHIP BETWEEN THE BIRTH WEIGHT AND PERINEAL RUPTURE IN NORMAL LABOR IN PRIMIPAROUS WOMEN

Nanik Handayani

Nahdlatul Ulama University of Surabaya, Jl. SMEA No. 57 Surabaya

E-mail: nanik\_handayani@unusa.ac.id

## ABSTRACT

**Introduction :** Perineal rupture which can be resulted from the baby's birth weight mostly happens in the first labor and often appears in the next labors. The early survey shows the high incidence rate of perineal rupture in normal labor. Therefore, this research was purposed to find out the relationship between the birth weight and the level of perineal ruture in normal labor in primiparous women visting Puskesmas Taman Sidoarjo. **Method :** the design of research done from October until December 2015 was cross sectional. The population involved the primiparous women, totally 23 people visiting Puskesmas Taman Sidoarjo, in which 22 respondents were chosen as the samples by using the simple random sampling technique. The data were analyzed by using Spearman's Rank test with the  $\alpha < 0.05$ . **Result :** the result of research showed that nearly all of the primiparous women delivered their babies with normal birth weight (81.8%), whereas most of them experienced the perineal rupture level II (68.2%). The result of Spearman's Rank test showed that  $p = 0.021$  in which  $0.021 < 0.05$  so that  $H_1$  was accepted illustrating that there was a relationship between the birth weight and the level of perineal ruture in normal labor in primiparous women visting Puskesmas Taman Sidoarjo. **Discussion:** In conclusion, the higher the birth weight is, the higher the risk of perineal rupture will happen. Therefore, the antenatal care should be developed more, especially in monitoring the birth weight during pregnancy because the fetal weight can be esimated by the increase of the mother's birth weight.

**Keywords:** birth weight, perineal rupture, primiparous

## INTRODUCTION

Rips through the birth canal is the second most common cause of postpartum hemorrhage. Rupture perineum occurs in almost all the first delivery and it is not uncommon in labor next, errors in technique straining can also affect the occurrence of rupture of the perineum that when maternal straining while lifting buttocks, than it makes the process of pushing is not a maximum, can also exacerbate rupture perineum (Cunningham, et al, 2006). Birth weight effect on perineal stretching the perineum rigid so as easily rupture (Cuningham, 2005). Spontaneous laceration of the vagina or perineum may occur when the head and shoulders are born. Laceration incidence increases when babies are born too soon and not controlled. Rupture perineum to cause maternal postpartum hemorrhage.

Fetal factors that cause rupture of the perineum is the birth weight, abnormal head position, shoulder dystocia, breech disorders and others. Birth weight more than 4000 grams may increase the risk of rupture of the perineum

this is caused by the perineum is not strong enough to withstand the strain the baby's head with a large weight babies (Wiknjosastro, 2007). Impact of perineal lacerations if not immediately anticipated it will cause a tear in the perineum comprehensive, result in postpartum hemorrhage and if not promptly treated can lead to anemia which will facilitate the occurrence of infection in the puerperal period.

Efforts to be made by health care workers is among the second stage, perineum rupture can be prevented by hand and anticipated maneuvers with good cooperation with the mother before and during delivery takes place. Provide guidance and breathing and relaxation techniques are good, the birth of the head can be controlled and allow time for the skin to stretch and reduce the possibility of rupture or laceration of the perineum. Objectives Knowing the relationship between birth weight with the degree of perineal rupture in normal labor primipara mothers in Puskesmas Taman Sidoarjo .

## RESEARCH METHOD

This type of research is cross sectional analytical ie where researchers take measurements or observations of variable data birth weight and degree of rupture perineum only one at a time. The population of this research is all primiparous mothers who gave birth in the health center park 23 respondents. The sample in this study is the mother primiparity in Taman Sidoarjo PHC as much as 22 respondents. The research was conducted in October to December 2015.

This study was conducted in Puskesmas Taman Sidoarjo. In this study, the sampling method used was probability sampling with simple random sampling technique. processing of data by cross-tabulation in the form of a percentage (%) and using the Spearman rank test and a significance level  $\alpha = 0.05$ .

## RESULT

Most of primiparous mothers who deliver their babies with low birth weight experienced a rupture perineum stage I (75%) and a small percentage experiencing rupture perineum stage II (25%). While nearly all primiparous mothers who give birth to babies with normal birth

weight experienced a rupture perineum stage II (77.8%), experienced a rupture perineum fraction stage I (16.7%) and stage III (5.6%). Spearman Rank test results obtained  $p = 0.021$ , then  $p < 0.05$ , mean  $H_0$  rejected and  $H_1$  accepted that there is a relationship between birth weight with the degree of perineal rupture in normal labor primipara mothers.

## DISCUSSION

The results of 22 studies described normal delivery primipara mothers, there were 14 respondents who gave birth to babies with normal birth weight, almost entirely (77.8%) experienced a rupture perineum degrees II. In infants born weighing less than 4000 grams at generally does not cause birth canal laceration as stretched muscles - the muscles of the perineum in accordance with the diameter of the baby's head is born. But in fact, normal birth weight can also caused a rupture perineum, it is influenced by factors - another factor that is one way of pushing the mother wrong, because at the birth mother is not abiding by what is recommended by the birth attendant. Characteristics of respondents by birthweight.

No	Birth weight	Frequency	Percentage (%)
1.	BBLR	4	18,2
2.	BBL Normal	18	81,8
3.	Big BBL	0	0
Amount		22	100

Almost entirely of 22 respondents give birth to babies with normal birth weight (81.8%).

### b. Characteristics of respondents based on the degree of rupture perineum

No	Degree of Rupture Perineum	Frequency	Percentage (%)
1.	Derajat I	6	27,3
2.	Derajat II	15	68,2
3.	Derajat III	1	4,5
4.	Derajat IV	0	0
Amount		22	100

Most of the 22 respondents ruptured perineum stage II (68.2%).

### c. Cross-tabulation of the relationship between birth weight with the degree of rupture perineum

No.	BBL	Degree of Rupture Perineum			Amount
		Degree I	Degree II	Degree III	
1.	BBLR	3 (75%)	1 (25%)	0 (0%)	4 (100%)
2.	NormalBBL	3 (16,7%)	14 (77,8%)	1 (5,6%)	18 (100%)
Amount		6 (27,3%)	15 (68,2%)	1 (4,5%)	22 (100%)

Most mothers pushing before the complete opening, not least also the mother at the time straining while lifting buttocks. Although the weight of babies born to normal if the way of pushing the mother of one, can still occur rupture perineum.

Rupture of the perineum is influenced by several factors among which factors maternal and birth attendant factors. Maternal factors that consists of several factors that precipitate parturition, loose or too strong, perineum fragile and edema, primiparous, varicose pelvic or scarring of the perineum and vagina as well as the flexibility of the birth canal. The first factor is the labor of confinement precipitate too quickly at less than 3 hours. Officers are often not ready to attending births and mothers pushing strong uncontrolled deflection of the fetal head occurs too quickly. This situation will increase the possibility of perineal lacerations (Manuaba, 2008). Second, loose or too strong. At the time of delivery of the energy required in the form of encouragement meneran mother if the mother straining too strong during delivery head which is the largest diameter of the fetus, it will cause perineal laceration (Winkjosastro, 2006). Third, perineum fragile and edema. In the process of childbirth in case of edema of the perineum then pervagina labor should be avoided because it will surely occur perineal lacerations (Manuaba, 2008). The fourth is a primipara. When labor is going to be pressure on the soft birth canal by the head of the fetus. Perineum intact on primi will easily occur perineal laceration (Manuaba, 2008). The fifth factor is maternal pelvic varicose or scarring of the perineum and vagina. Sixth, the flexibility of the birth canal. Flexibility of the birth canal is reduced when mothers are lack of exercise, or genital infections often. Infants who have a maximum head circumference will not be passed, if imposed will result in perineal laceration irregular and wide.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

Based on the results of research and discussion can be summarized as follows:

1. Almost all mothers primiparous in Puskesmas Taman give birth to babies with normal birth weight.

2. Most of the mothers primiparous in Puskesmas Taman experienced rupture perineum degrees II.

3. There is a relationship between birth weight with the degree of perineal rupture in normal labor primipara mothers in health centers Taman Sidoarjo.

### **Recommendation**

Based on the above conclusions, the suggestions of the researchers is:

1. Theoretical results of this study can be used in order to prove the theory that one factor in the rupture of the perineum in primiparous mothers is due to birth weight.

2. Practical

- a. For this study Health Officer for health workers should be able to be used as input and information in health care improvement ANC, especially in monitoring the increase or decrease in maternal weight during pregnancy. Fetal weight is affected by the increase or decrease in maternal weight, so the mother must maintain and regulate his diet because the larger the fetus is born will increase the risk of rupture of the perineum.

- b. For the Profession of Nursing This study for nurses to be used as consideration in order to improve the quality and standard quality nursing care, to optimize the assessment of maternal primipara who experienced rupture perineum, in order to do the determination of a proper diagnosis so that intervention is carried out in accordance with the existing problems , and can be used as a reference to anticipate as early as possible causes of the risk of rupture of the perineum in primipara mothers.

- c. For this research study place that is used as a benchmark ANC and INC that has been given to the mother primipara, especially in anticipation of the increase in maternal weight during pregnancy and minimize the occurrence of rupture of the perineum during childbirth.

## REFERENCE

- Arikunto, Suharsimi. 2010. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta
- Bobak.2005. *Buku Ajar Keperawatan Maternitas*. Jakarta: EGC
- Cunningham, F.Gary. 2005. *Obstetri Williams Vol.2 Edisi 21*. Jakarta: EGC
- Depkes RI.2002. *Panduan Praktis Maternal dan Neonatal*. Jakarta: Depkes RI
- Dinkes.2010.*Angka Kematian Ibu*.<http://dinkes.jatimprov.go.id>.Diakses: Tanggal 28 November 2012
- Dorland. 2006. *Kamus Saku Kedokteran*. Jakarta: EGC
- Fitariyanti.2007.*Survey Rupture*,<http://Skripsipedia.com/survey-rupture.html>. Diakses: Tanggal 28 November 2012
- Henderson, Christine. 2005. *Buku Ajar Konsep Kebidanan*. Jakarta : EGC
- Hollingworth, Tony. 2011. *Diagnosa Banding dalam Obsetri dan Ginekologi*. Jakarta : EGC
- Jaringan Nasional Praktik Klinik Kesehatan Reproduksi/JNPKR. (2008). *Asuhan Persalinan Normal*. Jakarta: JNPKR
- Kristiyanasari, Weni. 2010. *Gizi Ibu Hamil*. Yogyakarta: Nuha Medika
- Liu, David T.Y. 2007. *Manual Persalinan Edisi 3*. Jakarta: EGC
- Mansjoer. 2008. *Kapita Selekta Kedokteran*. Jakarta: Media Aesculapius
- Manuaba. 2008. *Gawat Darurat Obstetri Ginekologi dan Obstetri Ginekologi Sosial Untuk Profesi Bidan*. Jakarta: EGC
- Notoatmodjo, Soekidjo. 2010. *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta
- Prawirohardjo, Sarwono. 2007. *Ilmu Kebidanan*. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo
- Rohani, Reni saswita. Marisah. 2011. *Asuhan Kebidanan Pada Masa Persalinan*. Jakarta: Salemba Medika
- Saifuddin. 2002. *Buku Acuan Nasional Pelayanan Kesehatan Maternal dan Neonatal*. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo
- Simkin, Penny.P.J. Janet Whally. Aan Kepler. 2007. *Panduan Lengkap Kehamilan, Melahirkan, dan Bayi*. Jakarta: ARCAN
- Siti Misaroh, 2010. *Nutrisi Janin dan Ibu Hamil*. Yogyakarta: Nuha Medika
- Siswono.2003.*RupturePerineum*,<http://stikesharapanmama.blogspot.com/2011/05/ruptur-perineum.html>. Diakses: Tanggal 16 Oktober 2012
- Supariasa. 2002. *Penilaian Status Gizi*. Jakarta: EGC
- Varney, Helen. Jan M. Kriebs. Carolyn L. Geger. 2008. *Buku-Ajar Asuhan Kebidanan Volume 2*. Jakarta : EGC
- Winkjosastro. 2005. *Ilmu Kandungan*. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo