



THE DIFFERENCE RESULT OF PERINEAL MASSAGE AND KEGEL EXERCISES TOWARD PREVENTING OF PERINEAL LACERATION DURING LABOR

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ABSTRACT

About 70% women giving birth to vaginal have perineal trauma. Kegel exercise, perineal massage in third trimester of pregnant reduce rupture of the perineum. The purpose of this study was to learn how perineal torn in woman performing perineum massage and kegel exercise during pregnancy. The type of the study was experimental using Post Test Only Control Group Design. The study was conducted on pregnant woman, gestational age ≥ 34 weeks until delivery at the Independent Practice Midwife (IPM) from June to September 2018. The population and sample were 14 respondents. The sampling technique is purposive sampling. The samples were divided in 2 groups: 7 respondents in perineal massage method group and 7 respondents in kegel exercise method group. Perineal laceration data collection using onservasi way is to use the checklist sheet and partograf.

Data was analyzed by using the Man Whitney Test. The result of this study is 85,7% of group women who done perineal massage faced first degree of perineal laceration. However, there are only 14,3% women who done kegel exercise, got first degree of perineal laceration. There is a difference results of perineal massage and kegel exercise toward preventing of perineal laceration during labor, which is showed by p value at 0,026. The conclusions this study is the percentage of perineum that experienced lacerations exceeding grade 1 was more in the respondents who did a kegel exercise method.

Keyword: *Massage, Perineum, Exercise, Kegel, Laceration*

INTRODUCTION

Pregnancy and childbirth are very susceptible processes occurring complications that can endanger the mother and baby, and are one of the causes of maternal death (Mochtar, 2011). In the postpartum period, it is difficult to determine the terminology based on the time limit of childbirth which consists of the period I to IV. In the postpartum period various complications can occur such as bleeding due to uterine atony, placental retention and perineal rupture. Perineal rupture is a birth canal injury that occurs

at the time of birth of the baby either using a tool or not using a tool. Perineal rupture occurs in almost all first deliveries and not infrequently at the next delivery [2].

Factors that influence the occurrence of perineal rupture include maternal factors, fetal factors, and helping factors. Maternal factors include parity, maternal age, perineal condition, perineal flexibility, pushing too strongly. Fetal factors include fetal weight and posterior fetal position, facial presentation. Helper factors are the way of leading pushing, the ability to hold



the perineum during head expulsion, posing position and vaginal delivery factors (Mochtar, 2011). The incidence of bleeding due to cases of perineal rupture is more than 5.5% - 7.2% in primiparous and 4.0% in multiparous. Perineal rupture is classified according to its degrees, namely degrees I, II, III and IV. Perineum rupture commonly occurs in the midline and can be widespread if the fetal head is born too fast [3].

Dangers and complications of perineal rupture include bleeding, infection and disparity (pain during intercourse). Bleeding at perineal rupture can be severe especially in second and third degree tears or if the perineal tear extends sideways or rises to the vulva about the clitoris. Perineal rupture can easily be contaminated with feces because it is close to the anus. Infection occurs if the wound cannot immediately fuse, resulting in scarring. The scar tissue that forms after perineal laceration can cause pain during intercourse. Rigid perineum can make extensive tears inevitable [4].

About 70% of women giving birth to vaginal have perineal trauma [5]. Various ways to reduce perineum rupture, including with kegel exercise and perineal massage in third trimester of pregnant (Emery and Ismail, 2013). During pregnancy, the mother's pelvic bone will widen to prepare for the birth process later. Kegel exercises and perineal massage during pregnancy will maintain pelvic strength while maintaining the flexibility of the perineal muscles. Kegel exercises and perineal massage are the most effective ways to avoid perineum rupture [6]. It also effective for helping the pelvic floor muscles tighter and elastic [7].

According to [8], perineal massage in pregnancy can increase

perineal elasticity and reduce perineal trauma, so that perineal massage can effectively reduce perineal torn during childbirth. The results of [9] showed that the incidence of perineal rupture in the primigravida and multigravida groups who performed perineal massage could significantly reduce the degree of perineal rupture compared to the group that did not perform perineal massage. According to [10], Kegel exercises also help make pubokogsigeus muscle (PC) which is located around the pelvis until the coccyx becomes strong and supple, and increases blood circulation in the area around the vagina, which can help during pregnancy and labor.

Midwife in providing childbirth assistance use to perform a "mother care service", which is minimizing invasive action by not carrying out episiotomy on every woman who had giving birth, except for certain indications such as shoulder dystocia, buttocks and perineal rigidity. Even this episiotomy must be approved by the mother or family. Routine episiotomy is not recommended because it can cause an increase in the amount of blood loss and risk of hematoma, increase the risk of infection, labor pain, more frequent lacerations of three or four degrees in routine episiotomy compared with no episiotomy [11].

One effort that has been done to improve the welfare of pregnant women during childbirth is the class of pregnant women who are taught pregnancy exercise, but there is no specific about perineal massage or kegel exercise. The results of research conducted by Rahayu in Semarang in 2015 on the differences in the results of perineal massage and kegel exercise on prevention of perineal torn at birth found that there were differences in perineal torn in women who performed perineal massage and



kegel exercise. Based on the results of a preliminary study conducted in the Independent Practice Midwife (IPM) of Padang, Indonesia, it was found that from 10 women giving birth, 7 women experienced perineal rupture both primigravida and multigravida and during pregnancy never performed

perineum and kegel exercises. Based on the description above, researchers want to study about perineal torn in pregnant women who performed perineal massage and kegel exercise during pregnancy.

MATERIAL AND METHODS

Type of this study was experimental with experimental using Post Test Only Control Group Design. The study was conducted on pregnant women with gestational age ≥ 34 weeks until delivery in Independent Practice Midwife (IPM) in Padang, Indonesia

from June to September 2018. The population and sample in this study was 14 respondents divided into 2 treatment groups: 7 respondents in the perineal massage group 7 respondents in the Kegrel exercises group. Data was analyzed in frequency distribution and the Man Whitney Test.

RESULT

This research was conducted on June 1 until September 5, 2018 in IPM Ika Putri R, M.Biomed; IPM Nurhaida, A.Md.Keb; IPM Hj. Gusniati, A.Md.Keb. Samples were 20 respondents with a excluded samples excluded as 6 respondents. Total samples in this study were 14 people. 10

samples obtained at IPM Hj. Gusniati, A.Md.Keb were given perineal massage treatment. 10 samples obtained at IPM Nurhaida, A.Md.Keb were given kegel gymnastic treatment. The results were analyzed by frequency distribution analysis and the Man Whitney Test.

A. Perineal Rupture of Mothers Who Perform Perineal Massage

Table 1.
Frequency Distribution of Perineal Rupture in Mother who Perform Perineal Massage

Perineal Rupture	f	%
Grade 2	1	14,3
Grade 1	6	85,7
Total	7	100

Table 1 shows that pregnant women who performed perineal massage experienced grade 1 perineal rupture as 85,7%.

B) Perineal Rupture of Mothers Who Perform Kegrel Exercise



Table 2
Frequency Distribution of Perineal Rupture in Mother who Perform Kegel Exercise

Perineal Rupture	f	%
Grade 2	6	85,7
Grade 1	1	14,3
Total	7	100

Table 2, shows that pregnant women who performed kegel exercise experienced grade 1 of perineal rupture as 14,3%.

C) Difference results of perineal massage and kegel exercise toward preventing of perineal laceration during labor

Tabel 3.
Difference results of perineal massage and kegel exercise toward preventing of perineal laceration

treatment	laceration		total
	grade 1	grade 2	
Perineal massage	6 (85,7%)	1 (14,3%)	7 (100%)
Kegel exercise	1 (14,3%)	6 (85,7%)	7 (100%)
total	7 (50%)	7 (50%)	14 (100%)

Table 3 shows that 85,7% of group women who done perineal massage faced first degree of perineal laceration

There is a difference results of perineal massage and kegel exercise toward preventing of perineal laceration during labor, which is showed by p value at 0,026.



DISCUSSION

A. Perineal Rupture of Mothers Who Perform Perineal Massage

The study found that pregnant women who performed perineal massage experienced grade 1 perineal rupture as 85,7%.

Based on [12] study, perineal massage in primiparas at <36 weeks gestation can reduce the degree of perineal rupture in the second stage of childbirth.

In accordance with the theory of [13] that perineal massage can stimulate keperineum blood flow which will help accelerate the healing process after childbirth, help the mother more relaxed during the examination, help prepare the mother mentally against the pressure and strain of the perineum when the baby's head will come out, avoiding rupture. perineum during childbirth by increasing the elasticity of the perineum. Then one of the ways that can be done to avoid the occurrence of rupture is by doing a perineal massage.

The mechanism of perineal massage can reduce the degree of perineal rupture by giving massage, the blood flow will be smooth and the nutrition of the muscles around the perineum will be more fulfilled so as to maintain elasticity and elasticity of the muscles. By doing the rubbing motion, it will increase the muscle temperature, so that the increase in ATP production, where ATP is used to help Ca ++ ions pumped back into the sarcoplasmic reticulum by active transport, so that troponin and tropomyosin active again to inhibit the actin-myosin reaction. It means that aktyn-myosin is not active, then the muscles will relax ([14] [15]).

B. Perineal Rupture of Mothers Who Perform Kegel Exercise

The study found that pregnant women who performed kegel exercise experienced grade 1 of perineal rupture as 14,3%.

According to [16], to reduce the rupture of the perineal, Kegel exercises (Kegel exercises) and perineal massage in third trimester pregnant women should be performed. Kegel exercises and perineal massage are the most effective ways to avoid rupture of the perineum [17].

An often Kegel exercises increase circulation in the perineum, so that pain perception and swelling can be reduce [18]. Kegel exercises are also be performed every day, at least 3 times a day: when the mother swallows the water suddenly the mother stops the urine by contracting or squeezing these muscles, then loosening again so that the urine emits smoothly [19].

C. Difference results of perineal massage and kegel exercise toward preventing of perineal laceration during labor

The study found that 85,7% of group women who done perineal massage faced first degree of perineal laceration

There is a difference results of perineal massage and kegel exercise toward preventing of perineal laceration during labor, which is showed by p value at 0,026.

[20] found a difference in the degree of perineal rupture performed perineal massage and kegel exercise in preventing perineal tears (p value 0.037). Perineal massage is better at reducing



the degree of perineal torn than kegel exercise.

Perineal massage is performed by primiparous mothers from 34 weeks' gestation to near delivery. Perineal massage is done by applying coconut oil or olive oil to the perineum area, taking a deep breath and relaxing conditions, then the mother inserting one thumb or both hands with the position of the finger bent into the perineum, while the other fingers are outside the vagina. Perineal massage with the same pressure from top to bottom (towards the anus), then side to left and right at the same time. Initially the mother will feel the perineal muscles in a still tight state, but over time and the more often the mother does the massage, the perineal muscles will begin to flex (not tight) and relax. This action is performed by the mother once a day. Reduced perineal rupture in mothers who exercise a combination of perineal massage and Kegel exercises during pregnancy can be caused because the perineal tissue is massaged to become more relaxed so as to increase the elasticity of the perineum so as to facilitate labor. Mothers who do Kegel exercises can resist contractions during labor and regulate breathing during straining. In the perineum, there are elastic connective tissue and collagen, when stimulated when perineal massage is carried out strain and contraction in the perineum area so that the blood flow becomes smooth and the perineum becomes elastic. This proves that the benefits of perineal massage can help soften the perineal tissues. The network will open without resistance during labor and can facilitate the birth of the baby [21].

CONCLUSION

The conclusions this study is the percentage of perineum that experienced lacerations exceeding grade

1 was more in the respondents who did a kegel exercise method.

REFERENCES

- Anggraini. 2015. Relationship of Perineal Massage with Tearing of the Way Born in Primipara Maternity in IPM Metro Selatan City Metro City. *Journal of Health*, Volume VI, No. 2, October 2015, pages 155-159.
- Antini, A. 2016. The effectiveness of kegel gymnastics on the time of healing perineal wound in the mother is normal post partum. *Journal of Sound Health Research Forikes*, Volume VII No. 4, October 201.
- Aprilia, Y. 2010. *Hypnostetery: Relax, Comfortable And Comfortable While Pregnant And Childbirth*. Jakarta. Media Ideas.
- Aprilia, Y. 2010. *Hypnostetery: Relax, Comfortable And Comfortable While Pregnant And Childbirth*. Jakarta. Initiated Media.
- Aritonang, J 2016. Overview of Pregnant Women Knowledge about Perineal Tearing Prevention in Second Stage of Birth in the Simapang Public Health Center Work Area Four Asahan Districts in 2015. *Journal of Maternal and Neonatal*, 12/05 .2016. 35-42.
- Bechmann, G. 2011. Antenatal Perineal Massage for Reducing



- Perineal Trauma. Cochrane database of systematic Review. Issue 1 Art. No. CD005123.DOI.
- Boba. 2010. Maternity Nursing Textbook, Medical Book EGC Publisher, Jakarta.
- Donmez, S and Kavlak, O .2015. Effects of Perineal Massage and Kegel Exercises on the Integrity of Postnatal Perine. Health, 2015, 7, 495-505.
- Donmez, S and Kavlak, O. 2015. Effects of Perineal Massage and Kegel Exercises on the Integrity of Postnatal Perine. Health, 2015, 7, 495-505.
- Elvesiver's study. 2010. perineal massage in primipara
- Emery, S and Ismail, S. 2013. Patient Awareness and Acceptability of Antenatal Perineal Massage. Journal of obstetrics gynecology 33: 8.839-43.
- Horneman, A and Kamische 2010. Advanced Age a risk factor for Higher Grade Perineal Lacerations during delivery in Nulliparous Women. Arch Gynecology Obstetry Vol. 281 (1): P59-64.
- Mehran, G, and Bijan, F. 2011. Reducing perineal trauma through perineal massage with vaseline in second stage of labor. Mterno-fetal medicine, Arc Gynecol Obstetric.
- Mochtar, Synopsis of Obstetrics Pathology Physiology, Volume 1. Volume 1. EGC. Jakarta.
- Nursalam. 2003. Concept and Application of Nursing Research: Thesis Thesis Guidelines, and Nursing Research Instruments, Jakarta. Salemba Medika.
- Prawirohardjo, S .201. Midwifery. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo.
- Prawirohardjo, S. 2011. Midwifery. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo.
- Rahayu. 2015. Differences in the Results of Perineal Massage and Kegel Exercise on the Prevention of Perineal Tears in Labor in Midwives. Journal of Health Research Vol. 4 No. 2, May 2015.
- Simkin, P 2015. Childbirth Pocket Book. Jakarta: EGC.
- Widianti, A.T and Proverawati, A .2015. Health Exercise. Yogyakarta: Nuha Medika.
- Wiknjosastro, Gynecology. Jakarta: Bina Pustaka Foundation, 2010.