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Perineal Influence *Massage* and warm compresses during the active phase of labor for perineal tearing in PMB Dewi

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ABSTRACT

High maternal mortality rate due to bleeding, one of which is due to a tear in the birth canal, around 4-5%. The percentage of perineal tears is small but this problem can be a serious problem in maternal deaths. The purpose of writing this research is to determine the influence of the perineum *massage* and warm compresses in the active phase of labor against perineal tears. This type of research is quantitative, with research design included in the type of research experiment. In this research, a comparative quantitative research design will be used. Based on the research location, it is clinical research and there are treatments in the research. Based on the data source, it is primary research. This research is included in this type of research Almost Experimental with Posttest Only Control Group Design. In this research design, there are two groups selected randomly. One group acts as the control group and the other group acts as the experimental group. Then, within a predetermined time period, the experimental group was given treatment. Then measurements were carried out on both groups. This research was conducted at the Mandiri Dewi Midwife Practice, Sidoarjo. The research results show that the distribution of events is not rupture perineum occurred more frequently in the intervention group of 6 people (85.7%) who received perineal massage and warm compresses. After testing *Chi-Square* earned value $p = 0.005$ (<0.05) then statistically it shows the influence of the perineum *massage* and warm compresses in the active phase of labor against perineal tears. There is Perineal Influence *Massage* and Warm Compresses in the Active Phase of Labor on the Incident of Perineal Tears in PMB Dewi. The secretion of the hormones progesterone and relaxin during pregnancy will increase; these hormones help muscles and joints to soften and stretch; This process takes place throughout the body, pelvic floor, and perineum. Slow, gentle perineal massage and warm compresses can increase the flexibility of the perineum as blood circulation increases. (Akhlaghi et al., 2019)

Keywords: Warm compress, Perineum *massage*, Perineal tear

INTRODUCTION

In 2019, the MMR for East Java Province reached 89.81 per 100,000 live births. The three highest causes of maternal death in 2019 were preeclampsia/eclampsia, namely 31.15%, 162 people had bleeding, namely 24.23%, other causes, namely 23.1% or 120 people (East Java Health Profile, 2019). Maternal Mortality Rate is one indicator to see the level of women's welfare (Sumarmi, 2017). Bleeding postpartum is blood loss of more than 500 ml in the first 24 hours due to uterine atony (50%-60%), retained placenta (16%-17%), retained placenta (23%-24%), laceration or tearing of the birth canal (4%-5%) and blood disorders (0.5%-0.8%). The percentage of tears in the birth canal or perineum is small but this problem can be a serious problem in maternal deaths (Widjayati et al., n.d.).

Experts state that 9 out of 10 women experience a tear in the birth canal and 1 in 100 people experience a third and fourth degree perineal tear. Perineal rupture is a complication of the second stage of labor which can cause dysfunction of the female reproductive organs, bleeding and lacerations. As many as 85% of women giving birth vaginally can experience perineal rupture (Fatimah, S. SiT & Prasetya Lestari, S. ST, 2019). WHO said, in the world in 2010, of the 2.7 million mothers giving birth, 60% of cases of women giving birth experienced perineal tears. In Indonesia, perineal lacerations are experienced by 75% of mothers giving birth vaginally. In 2017, it was found that out of a total of 1951 spontaneous vaginal births, 57% of mothers received perineal sutures (28% due to episiotomy and 29% due to spontaneous tears) (Indonesian Health Profile, 2018). Based on a report from the East Java Provincial Health Service (2012), the incidence of infection due to perineal rupture in East Java is still high, perineal trauma or perineal rupture is experienced by 70% of women giving birth vaginally.

The impact of a tear in the birth canal in the mother includes infection in the suture wound which can spread to the bladder canal or the birth canal which can result in bladder complications or infections in the birth canal. A number of factors The causes of perineal tears consist of maternal factors, fetal factors and supporting factors. Fetal factors include a large fetus, abnormal positions such as occipito posterior, facial presentation, forehead presentation, breech presentation, shoulder dystocia, and anomaly congenital such as hydrocephalus. Helping factors include how to lead pushing, how to communicate with the mother, skills in holding the perineum during expulsion of the baby's head, episiotomy and pushing position. Maternal factors include

primigravida, perineal flexibility, presence of edema perineum, narrowness of the pelvic outlet, pushing too hard, partus precipitatus, delivery with procedures, such as vacuum extraction, forceps extraction, extraction version and embryotomy, varicose veins in the pelvis and scar tissue in the perineum and vagina (Oxorn, 2010).

To minimize the incidence of perineal tears it is necessary prevention is carried out, one of which is by massaging the perineum. Perineal massage (*Perineum Massage*) aims to increase blood flow, elasticity and relaxation of the pelvic floor muscles. This perineal massage can be started when the gestational age is > 34 weeks. The risk of perineal laceration in the massage group was smaller than in the group without perineal massage (Zare et al., 2014). Perineal massage during pregnancy can reduce the incidence of perineal trauma (Beckmann & Stock, 2013). Perineal massage can prevent perineal lacerations. (Jones & Marsden, 2008). Perineal massage will help soften the perineal tissue so that the tissue will open without resistance during labor, to make it easier for the baby to pass. Perineal massage during pregnancy can protect the function of the perineum. This perineal massage is very safe and not dangerous (Simkin, 2008). Based on this data, the incidence of perineal rupture in primigravida is more because the perineum is stiff or less elastic, especially in primigravida because the vagina has never been passed by the fetus so the vagina has to stretch in such a way to expel the fetus which can result in perineal rupture. The use of warm compresses (cloths), kept warm between contractions, has been shown to significantly reduce third and fourth degree tearing and pain at birth. (Fatimah, S. SiT & Prasetya Lestari, S. ST, 2019)

Based on the background above, I am interested in researching the influence of the perineum *massage* and warm compresses in the active phase of labor against perineal tears.

METHOD

This type of research is quantitative, with the research design included in the type of experimental research. In this research, a comparative quantitative research design will be used. Based on the research location, it is clinical research and there are treatments in the research. Based on the data source, it is primary research conducted in July-August 2021. This research is included in the Quasi Experimental type of research with a Posttest Only Control Group Design. In this research design, the number of research subjects was 14 primigravida term mothers who

met the criteria, where 7 research subjects in the intervention group were given perineal massage and warm compress treatment and 7 research subjects in the control group were not given perineal massage and warm compress treatment. This research was conducted at the Mandiri Dewi Midwife Practice, Sidoarjo.

RESEARCH RESULT

Table 1 Influence of the Perineum *Massage* and Warm Compresses in the Active Phase of Labor Against the Incident of Perineal Tears in PMB Dewi in 2021.

Perineum Massage	**The perineum is broken**				**Total**		**PR 95% THERE**	***P* value**
	Tdk rupture		rupture					
	f	%	f	%	f	%		
Intervention	6	85,7	1	14,3	7	100	0,143 (0,023-0,877)	0,005
Control	0	0	7	100	7	100		
Amount	6		8		14			

Table 1 shows that the incidence of non-rupture occurred more frequently in the intervention group of 6 people (85.7%) who received perineal massage and warm compresses. After testing *Chi-Square* earned value $p = 0.005$ (<0.05) then statistically it shows the influence of the perineum *massage* and warm compresses in the active phase of labor against perineal tears.

DISCUSSION

Analyzing the Influence of the Perineum *Massage* and Warm Compresses in the Active Phase of Labor Against the Incident of Perineal Tears in PMB Dewi in 2021

Based on Table 1 shows that the incidence of non-rupture occurred more frequently in the intervention group of 6 people (85.7%) who received perineal massage and warm compresses. After testing *Chi-Square* earned value $p = 0.005$ (<0.05) then statistically it shows the influence of the perineum *massage* and warm compresses in the active phase of labor against perineal tears.

These results are in line with Wewet Savitri's (2014) research results showing that the Chi square value was obtained $p = 0.02$ (<0.05), then statistically it shows that there is an influence of perineal massage in primigravida on the incidence rupture perineum at delivery between groups control and intervention.

Karacam et al also found that perineal massage can reduce the number of perineal ruptures and procedures for episiotomy during delivery. (Karacam, 2012)

Aprilia stated that minimal perineal tearing could occur because the mother was pregnant do Perineal massage relaxes the tissue in the perineum so that it can increase the elasticity of the birth canal which can facilitate the birthing process and reduce the incidence of perineal tears. (Aprilia, 2010)

Perineal massage can also be a coping mechanism for mothers, namely to eliminate fear and anxiety during childbirth because during tissue pregnancy around The perineum has been massaged so that the tissue around the perineum becomes elastic.

Based on theory and research results, it can be concluded that one of the factors that influenced perineal rupture in the research at PMB Dewi was the number of perineal massages and warm compresses. The incidence of rupture occurred almost in primigravida women who gave birth and pushed too hard, however, after perineal massage and warm compresses, the majority of research subjects in the intervention group did not experience perineal rupture or also reduced the degree of rupture. rupture perineum.

Perineal massage can prepare the perineal skin tissue to be more elastic so that it stretches more easily. Apart from that, it increases the elasticity of the vagina to open it, as well as trains the mother to actively relax the perineum when she feels pressure when the baby's head is born. This can reduce perineal tearing, reduce the use of episiotomies, and reduce the use of other birth aids.

Many mothers feel a change in the stretchability of their perineal area after massage. Inadequate elasticity of the perineum is a maternal factor that greatly influences the occurrence of perineal rupture and episiotomy. (Cunningham, 2013)

Chomaria said that episiotomy is a procedure that involves injuring the perineum when a mother is about to give birth to her baby to make it easier. production babies without irregular tearing. This is what many pregnant women worry about before giving birth. Actually, this is

possibly reduced. The risk is by training the elasticity of the perineum so that there is no need for an episiotomy by medical personnel who help the mother when giving birth to her baby. Mothers can massage the perineal area by applying lubricant to their fingers, placing their thumbs on the perineum, gently and slowly pressing the perineum towards the rectum (anus), towards the sides and do this well and regularly. (Chomaria, 2012)

Connective tissue in the perineum unites other different tissues through accumulation of proteins and gel-like substances secreted from fibroblasts into the spaces surrounding the cells. The secreted protein substances include collagen, a thick white fiber that functions as a structural support, elastic, stretchable protein that allows tissue to flex when stretched and reticular fibers, which are strands of thin, flexible fibers that allow the organ to accommodate an increase in volume. A gel-like substance, consisting mostly of acid hyaluronic acid, there are interspersed in the whole room intestine to retain water and function as support and protection. (Corwin, 2009)

Stretching of the perineum and tears in the perineum during labor can weaken the pelvic floor muscles and vaginal walls, trauma to the perineum can also cause discomfort and pain during sexual intercourse.

So it is necessary to massage the perineum and warm compresses during labor. Based on this research, it can be analyzed that there is an influence of perineal massage and warm compresses on the incidence of perineal rupture during labor between the intervention group and the control group, because in the area The perineum contains elastic connective tissue and collagen, so if it is stimulated by massaging the perineum and warm compresses, stretching and contraction will occur in the perineal area so that blood flow becomes smooth and the perineum becomes elastic.

Stretching the perineum during labor can result in positive changes if the perineum is elastic, flexible and flexible, then the incidence of perineal rupture can be minimized or no perineal rupture occurs at all (perineum is intact) and negative changes if the perineum is not elastic, flexible and flexible, the strain on the perineum will result in perineal rupture. So one way to avoid perineal rupture is to massage the perineum and use warm compresses.

This proves the benefits of perineal massage and warm compresses which can help soften the perineal tissue so that the tissue will open without resistance during labor, to make it easier for the baby to pass. Perineal massage and warm compresses make it possible to give birth to a

baby with the perineum remaining intact. Perineal massage and warm compresses are techniques for massaging the perineum and warm compresses during the active phase of labor to increase blood flow to this area and increase the elasticity of the perineum. Increasing the elasticity of the perineum will prevent perineal tears and episiotomies.

CONCLUSION

1. In this study it was found that the distribution of events was not rupture perineum occurred more frequently in the intervention group of 6 people (85.7%) who received perineal massage and warm compresses.
2. test *Chi-Square* earned value *p*= 0.005 (<0.05) then statistically it shows that there is an influence of the perineum *massage* and warm compresses in the active phase of labor against perineal tears in PMB Dewi

REFERENCES

Akhlaghi, F., Sabeti Baygi, Z., Miri, M., & Najaf Najafi, M. (2019). Effect of Perineal Massage on the Rate of Episiotomy. *Journal of Family & Reproductive Health*. https://doi.org/10.18502/jfrh.v13i3.2130

Aprilia Y. Rileks nyaman dan aman saat hamil dan melahirkan. Jakarta: Gagas Media; 2010.

Asrinah, D. (2010). Asrinah, dkk. Asuhan Kebidanan Masa Kehamilan. Yogyakarta : Graha Ilmu ; 2010. *Asrinah*.

Beckmann, M. M., & Stock, O. M. (2013). Antenatal perineal massage for reducing perineal trauma. In *Cochrane Database of Systematic Reviews* (Vol. 2013, Issue 4). John Wiley and Sons Ltd. https://doi.org/10.1002/14651858.CD005123.pub3

Bleicher, I., Sagi-Dain, L., Bahous, R., & Sagi, S. (2020). 1201: Effect of antepartum perineal massage on perineal tears during first vaginal delivery. *American Journal of Obstetrics and Gynecology*, *222*(1), S738–S739. https://doi.org/10.1016/j.ajog.2019.11.1213

Chomaria N. Melahirkan Tanpa rasa sakit. Jakarta: Kompas Gramedia;

2012. Corwin, Elizabeth J. Buku saku patofisiologi. Jakarta: EGC; 2009..

Fatimah, S. SiT, M. K., & Prasetya lestari, S. ST, . M. Kes. (2019). *Pijat Perineum* (S. Desy Rachmawati (Ed.); 2019th ed.). PUSTAKA BARU PRESS.

Idaman, M., & ., N. (2019). PENGARUH PIJATAN PERINEUM DAN SENAM KEGEL TERHADAP PENGURANGAN RUPTUR PERINEUM PADA IBU BERSALIN.

Jurnal Kesehatan Medika Saintika, *10*(1), 39. https://doi.org/10.30633/jkms.v10i1.307

Magoga, G., Saccone, G., Al-Kouatly, H. B., Dahlen G, H., Thornton, C., Akbarzadeh, M., Ozcan, T., & Berghella, V. (2019). Warm perineal compresses during the second stage of labor for reducing perineal trauma: A meta-analysis. *European Journal of Obstetrics and Gynecology and Reproductive Biology*, *240*. https://doi.org/10.1016/j.ejogrb.2019.06.011

MERITA VITRISIA. (2017). *Karya tulis ilmiah penerapan pijat perineum untuk mengurangi ruptur perineum saat persalinan di klinik Pratama permata ibu tersobo, prembun Diajukan Untuk Memenuhi Jenjang Pendidikan Diploma III Kebidanan Disusun oleh : MERITA VITRISIA B1401183 PROGRAM ST*.

Mochtar, R. (2013). *Sinopsis Obstetri: Obstetri Fisiologi*. In *EGC*.

profil kesehatan indonesia. (2018). *Provil Kesehatan Indonesia 2018* (Vol. 1227, Issue July). https://doi.org/10.1002/qj

Profil Kesehatan Jawa Timur. (2019). (BAB1) buku data menurut provinsi dan kabupaten. *Profil Kesehatan Provinsi Jawa Timur*, 25–26.Putri, D. M. P., & Amalia, R. N. (2019). *Terapi Komplementer : Konsep dan Aplikasi dalam Keperawatan*. pustaka baru.

Sulistyawati, A. (2009). Asuhan Kebidanan Pada Masa Kehamilan. *Jurnal Kehamilan*.

Sumarmi, S. (2017). MODEL SOSIO EKOLOGI PERILAKU KESEHATAN DAN PENDEKATAN CONTINUUM OF CARE UNTUK MENURUNKAN ANGKA KEMATIAN IBU. *The Indonesian Journal of Public Health*, *12*(1), 129. https://doi.org/10.20473/ijph.v12i1.2017.129-141

Widjayati, D. B., Bps, D., Kecamatan, D., Natami, N., Andyna, P., Runiari, N., Kp, S., Kep, M., Mat, S., Mastini, N. I. G. A. A. P., & Kep, S. (n.d.). *Pengaruh perineum massage terhadap derajat robekan perineum pada ibu primigravida*.

Wiknjosastro H. *Ilmu Kebidanan*. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo; 2010. hlm. 72-5.

Zare, O., Pasha, H., & Faramarzi, M. (2014). Effect of perineal massage on the incidence of episiotomy and perineal laceration. *Health*, *06*(01), 10–14. https://doi.org/10.4236/health.2014.61003