

Analysis of Factors Affecting the Implementation of Perineal Massage in Pregnant Women in the Tondomulyo Pati Village Area

Naomi Parmila Hesti Savitri^{1*}, Sifa Altika²

¹⁻²Bakti Utama Pati College of Health Sciences, Indonesia

*Corresponding Author: naomisavitri@gmail.com

Abstract. Perineal rupture is one of the causes of the increase in maternal mortality. The incidence of perineal rupture in pregnant women in Indonesia is often experienced by vaginal delivery mothers. Perineal lacerations increase the risk of damage to the anise spincher, increase pain in the first days of the postpartum period, and increase the risk of infection. One of the efforts that can be made to prevent tears in the perineum during childbirth is with a perineal massage. Massage is an act of pressure by the hand on soft tissues, in order to reduce pain, produce relaxation, and/or improve circulation.

The method of this research is a survey using *cross sectional shorts*. Data analysis uses linear regression tests. The results of the study showed that the factors that can affect perineal massage in pregnant women are the support of the husband with a P value of 0.000 ($p < 0.05$) and the mother's knowledge of perineal massage with a P value of 0.000 ($p < 0.05$). Husband's support can affect the perineal massage of pregnant women by 12.33% compared to the factors of knowledge, mother's age, gestational age and parity. The conclusion of the study is that the husband's support is greater in influencing the implementation of perineal massage in maternity mothers.

Key words: Perenium Massage, Perenium Rupture, pregnant women

INTRODUCTION

One of the causes of AKI is postpartum hemorrhage. Perineal rupture is one of the causes. The incidence of perineal rupture in pregnant women in the world in 2015 was 2.7 million cases of which this figure is expected to reach 6.3 million by 2050 if it does not receive good attention and management. In Indonesia, perineal lacerations are experienced by 75% of mothers who give birth to vaginas. 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) (Ministry of Health of the Republic of Indonesia, 2017).

In Central Java Province, the number of maternal deaths in 2019 was 416 cases, 64.18% of maternal deaths occurred during postpartum, 25.72% during pregnancy and 10.10% during childbirth. The causes of maternal mortality are hypertension in pregnancy 29.6%, bleeding 24.5%, infection 6%, circulatory system disorders 11.8%, metaobic disorders 0.5%, and others 27.6%. (Central Java Provincial Health Office, 2019).

The incidence of perineal rupture in the Tondomulyo area, Pati Regency was 178 people (45.99%) out of a total of 387 people (100%) of mothers who gave birth in 2021. Perineal rupture causes bad effects for the mother, including infection of the suture wound which can spread to the urinary tract or the birth canal. In addition, bleeding can also occur due to the opening of blood vessels that do not close completely so that bleeding occurs continuously. If not treated quickly and appropriately, it will result in an increase in the number of maternal deaths due to bleeding. Interventions carried out by midwives to prevent other complications during the postpartum period, especially with perineal rupture with incentive perineal treatment.

The impact of perineal tears includes increasing bleeding, increasing the depth of perineal lacerations, increasing the risk of damage to the spine, increasing pain in the first days of the postpartum period, and increasing the risk of infection (Ministry of Health, 2013). One of the efforts that can be made to prevent tears in the perineum during childbirth is with a perineal massage.

According to Elly, massage is an act of pressure by the hand on soft tissues, usually tendon muscles or ligaments, without causing a shift or change in joint position to reduce pain, produce relaxation, and/or improve circulation. Basic movements include circular movements performed by the palms, pressing and pushing forward and backward using force, patting, cutting, squeezing, and twisting movements. This action is done gently so that it helps the mother feel fresher, relaxed, and comfortable

before delivery.

The benefits of perineal massage are to prevent perineal tears and episiotomy. Perineal massage can also improve blood flow, soften the tissues around the mother's perineum and elastic all muscles related to the labor process including vaginal skin. When all the muscles become elastic, you don't need to strain too hard, just slowly, even if the process is smooth, the tear in the perineum does not occur and the vagina does not need to be stitched.

From the results of Umu Basyiroh's (2015) research on the level of knowledge of pregnant women in the second trimester about perineal massage, it is known that factors that affect knowledge include education, work, age and experience, and lack of curiosity. The results of the study showed that 60.7% of mothers who knew enough about perineal massage were 60.7%. Other factors that affect are the mother's age, age of conception, parity, and husband support.

From the results of a preliminary survey conducted in Tondomulyo Village with an obsession with 10 maternity mothers in November 2022, it was found that 7 pregnant women had not carried out perenium massage, while 3 other maternity mothers had performed perenium massage.

Based on the above background, the researcher is interested in conducting a study entitled "Analysis of Factors Affecting the Implementation of Perineal Massage in Pregnant Women in the Tondomulyo Village Area, Pati".

METHODS

The research method used in this study is *a survey* using cross sectional *abbreviations* where the research is carried out without intervention on the research subjects. The estimated population of maternity mothers in Tondomulyo Village, Pati is 58 people. The sample in this study uses a total sampling of 58 people. Data analysis uses a linear regression test to see the factors that affect the implementation of perineal massage, namely. knowledge, maternal age, gestational age, parity, husband support.

RESULTS AND DISCUSSION

The results of the research on pregnant women in Tondomulyo Village regarding "analysis of factors affecting the implementation of perineal massage in pregnant women in the Tondomulyo Village area" are described in the explanation below.

1. Univariate Analysis

a. Distribution of Frequency of Perineal Massage Implementation in Pregnant Women

Table 1. Frequency distribution of Perineal Massage Implementation

Perineal Massage	Frequency (F)	Percentage (%)
Yes	42	72.4
Not	16	27.6
Sum	58	100.0

Source: Primary Data, 2023

Based on table 1 respondents who performed perineal massage were 42 people (72.4%), and those who did not perform perineal massage were 16 people (27.6%). Perineal massage is performed by midwives during or maternal visits to Antenatal Care (ANC) pregnancy examinations / treatments during pregnancy. Antenatal Care or which is a service that pregnant women get until before delivery to prevent complications early.

According to previous research, it was stated that out of a total of 297 people (100%) at the Imelda Worker Hospital Indonesia Medan, 25 women (25.8%) had perineal rupture on the baby's birth weight > 40001 grams (overweight), 110 mothers (11.3%) had perineal rupture on the baby's birth weight of 2500-4000 grams (normal). And 260 women (26.8%) who did not have perineal rupture in the weight of the baby born > 4000 grams (overweight), 35 women (36.1%) who did not have perineal rupture in the weight of the baby born 2500-4000 grams (normal). Based on the results of the chi-square test, it can be obtained with a value of $p\text{-value} = 0.019 < \alpha(0.05)$.

This proves the benefits of perineal massage which can help soften the perineal tissue so

that the tissue will open without resistance during delivery, to facilitate the passage of the baby. This perineal massage makes it possible to give birth to a baby with the perineum intact. Perineal massage is a technique of massaging the perineum during pregnancy or a few weeks before giving birth to increase blood flow to this area and increase the elasticity of the perineum. Increased perineal elasticity will prevent perineal tears and episiotomy.

b. Frequency distribution of knowledge of pregnant women

Table 2. Frequency distribution of Perineal Massage Knowledge

Knowledge	Frequency (F)	Percentage (%)
good	30	51.7
keep	19	32.8
less	9	15.5
Sum	58	100.0

Source: Primary Data, 2023

Through table 2, the respondents' knowledge of perineal massage was good for 30 people (51.7%), medium knowledge for 19 people (32.8%) and less knowledge for 9 people (15.5%). This good knowledge of the respondents is because the respondents know perineal massage from various media which is well absorbed through the internet, papers, advertisements and various other sources. In addition, information is obtained from other people such as friends, neighbors and people around them. According to the researcher, mothers who have less knowledge are because respondents have never received information about perineal massage.

The lack of knowledge in this study is because health workers, especially midwives, have never conveyed about perineal massage, this can be seen from the health center program, namely the pregnant women class. This is in line with Notoatmodjo's theory (2010) which states that knowledge is the result of knowing after a person senses a certain object.

c. Frequency Distribution Based on Mother's Age

Table 3. Frequency distribution based on Mother's Age

Age	Frequency (F)	Percentage (%)
<20 th	4	6.9
20-35	53	91.4
>35	1	1.7
Entire	58	100.0

Source: Primary Data, 2023

Through table 4.3 The age of most mothers/respondents was in the range of 20-35 years, which was 53 people (91.4%), while the age < of 20 years was 4 people (6.9%) and the age of > 35 years was 1 person (1.7%). This shows that the age for each group is still in the productive age category, which is 20-35 years old.

The results of this study are in line with the research of Fitri & Fatichah (2014) stating that the age of 20-35 years is the best age to conceive and give birth. However, in reality, perineal rupture still occurs at the reproductive age, namely 20 - 35 years old, which is caused by the number of children and age. This shows that based on the age of almost half (46.7%) of women aged 20 - 35 years old in childbirth, based on the incidence of perineal rupture, most (66.7%) of women in childbirth experience perineal rupture.

d. Frequency Distribution Based on Mother Parity

Table 4. Frequency distribution based on Mother Parity

Parity	Frequency (F)	Percentage (%)
Multi	40	69.0
Primi	18	31.0
Entire	58	100.0

Source: Primary Data, 2023

Through table 4, most of the respondents' parity in multigravida was 40 people (69.0%) while in primi gravida there were 18 people (31.0%). None of the respondents had grandemultigravida parity.

Multigravida mothers do more perineal massage than primi gravida because multi mothers already have previous childbirth experience and in carrying out perineal massage are not ashamed so that they can carry out perineal massage easily.

e. Frequency Distribution Based on Gestational Age

Table 5. Frequency Distribution by Gestational Age

Gestational Age	Frequency (F)	Percentage (%)
TM I	9	15.5
TM II	28	48.3
TM III	21	36.2
Entire	58	100.0

Source: Primary Data, 2023

Through table 5 Gestational age of mothers/respondents Most of them in the second trimester were 28 respondents (48.3%), then in the third trimester as many as 21 people (36.2%) and in the first trimester as many as 9 people (15.5%).

Perineal massage is a technique of massaging the perineum during pregnancy or starting from 35 weeks of pregnancy to increase blood flow to the perineal area and increase the elasticity of the perineum which is done every day with a frequency of 1 time a day and for a long time of about 5-10 minutes.

f. Frequency Distribution Based on Husband's Support

Table 6. Frequency distribution based on Husband Support

Husband's Support	Frequency (F)	Percentage (%)
Support	43	74.1
Doesn't support	15	25.9
Entire	58	100.0

Source: Primary Data, 2023

Through table 6, the distribution of the frequency of husband support shows that most of the husbands support pregnant women in performing perineal massage, which is as many as 43 people (74.1%), while those who do not support as many as 15 people (25.9%).

Husband support is very important to be given to pregnant women in terms of caring for pregnant women, especially in dealing with childbirth. The role of midwives, husbands and families is indispensable in providing support during the mother's perineal massage. The factors that can influence the husband to provide support to his pregnant wife such as work factors and age factors. The husband's work factor can affect, because a wife who is pregnant usually needs someone to be by her side to help and even help her. Every day the husband works, and it will result in less time with his pregnant wife. As for economic factors, the principle that is firmly held by entrepreneurs is "time is money" so that time is life for husbands and makes the time given to their pregnant wives less (Aisyah and Fitriyani (2016) in Thena, 2017).

2. Bivariate Analysis

This analysis was carried out to see the factors that affect the implementation of perineal massage in pregnant women. The variable analysis is as follows.

Table 7. Analysis of factors related to perineal massage.

		Perineal massage		P-value	OR
		Yes	Not		
Knowledge	Good	28	2	0,000	
	Keep	14	5		
	Less	0	9		
Mother's Age	<20 th	4	0	0,353	
	20-35 years	37	16		
	>35	1	0		
Parity	Primi	16	2	0,060	
	Multi	26	14		
Gestational Age	Tm I	9	0	0,100	
	TM II	20	8		
	TM III	13	8		
Husband's Support	Support	37	6	0,000	12,33
	Doesn't support	5	10		

Source: Primary Data, 2023

Through table 7 Based on table 7 based on logistic regression tests, it shows that the factors that can affect perineal massage in pregnant women are the support of the husband with a P value of 0.000 and the mother's knowledge of perineal massage with a P value of 0.000. Husband's support can affect the implementation of perineal massage for pregnant women by 12.33% compared to the factors of knowledge, maternal age, gestational age and parity.

Factors that can affect pregnant women in carrying out perineal massage are the support of the husband with a p-value of 0.000. Husband support is indispensable during the pregnancy of the pregnant wife. When the family has one of the family members who is pregnant, the husband is expected to always motivate, help, and accompany the family member so that the mother will feel comfortable and calm when there are problems that the mother experiences during her pregnancy.

Several previous studies on husband support for pregnant women were conducted in several regions. Research conducted by Septiani (2013), shows that as many as 98.1% do not have the support of their husbands and only 1.9% of pregnant women get the support of their husbands. Harumawati (2012) gave the opposite results, namely 53.3% of husbands provide support to pregnant women and

as many as 46.7% do not provide support. A similar study conducted by Mulyanti, Mudrikatun, and Sawitry (2010) in Semarang found that 56.7% did not receive the support of the husband and 43.3% received the support of the husband.

In addition to the support of the husband, the knowledge factor also has an influence on pregnant women in performing perineal massage, with the results of the analysis showing that the p value is 0.000 which means there is a significant influence. Good knowledge of perineal massage will make pregnant women regular and willing to do perineal massage. Meanwhile, a lack of knowledge can make pregnant women not do perineal massage because they are embarrassed, ignorant, and hesitant to do perineal massage and fear.

According to Meldafia Idaman and Niken in their research (2019), the average rating of the incidence of perineal rupture is lower in pregnant women who do exercises combining perineal massage and kegel exercises, which is 6.29 than pregnant women who only do perineal massage exercises, which is 12.93, and pregnant women who only do kegel exercises, which is 13.73. The p value of 0.03 ($p < 0.05$) showed that there was an effect of perineal massage and kegel exercises on the incidence of perineal rupture. The results of this study prove that the combination of perineal massage and kegel exercises carried out during the third trimester of pregnancy is more effective in reducing the risk of perineal tears during childbirth. The benefits of kegel exercises for pregnant women are that they can train the pelvic floor muscles (pelvic floor muscles) to control their ability to prevent perineal tears (Donmez, 2015).

Other factors such as parity, gestational age, and the age of the pregnant woman are not proven

to affect perineal massage with a p-value of > 0.05 , meaning that any factor of a person's parity does not affect in carrying out perineal massage, the parity number of more than 1 causes the perception in pregnant women that the perineum has been passed by the fetus so that it will be easier for the fetus to pass back and there will be fewer perineal ruptures.

There are several bias factors that cannot be controlled in this study due to the limited number of samples and factors that affect perineal laceration are not controlled, including one of them, namely the role of the midwife in leading normal delivery. According to Ott et al. (2015) stated that there are several risk factors that can affect perineal laceration, namely maternal age, gestational age during childbirth, birth weight of the baby, parity, episiotomy and childbirth aid. Midwives as birth attendants are included in the independent factors that affect perineal laceration as a whole.

CONCLUSION

Through the study in this study, it can be concluded that based on the results of the logistic regression test, it shows that the factors that can affect perineal massage in pregnant women are the support of the husband with a P value of 0.000 and the mother's knowledge about perineal massage with a P-value of 0.000. Husband's support can affect the massage of the perineal of pregnant women by 12.33% compared to the factors of knowledge, mother's age, gestational age and parity

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