EFFECTIVENESS OF PERINEUM MASSAGE IN PREGNANT WOMEN PRIMIGRAVIDA TRIMESTER III TO RUBBER OF THE BIRTH ROAD

Indah Fitri Agustina1, Risa Mundari2, Herliana3

Program Studi Kebidanan Program Sarjana STIKES Guna Bangsa Yogyakarta1
Program Studi D III Kebidanan STIKES Panca Bhakti Bandar Lampung2
Program Studi D III Kebidanan STIKES Panca Bhakti Bandar Lampung3

E-mail : agustinafitriindah@gmail.com1, risamundari@pancabhakti.ac.id2, herliana@pancabhakti.ac.id3

ABSTRACT

Background: Postpartum hemorrhage is the main cause of maternal death worldwide with an incidence of 5% to 10% of all deliveries. In Indonesia, the incidence of postpartum hemorrhage as the main contributor is 40%. Causes of postpartum hemorrhage are uterine atony, retained placenta, torn birth canal, retained placenta and blood clotting disorders.

The purpose of the study was to analyze the effect of perineal massage on third trimester primigravida pregnant women in the working area of Puspahiang Health Center, Tasikmalaya Regency.

Research method: Quasi experiment (Quasy experiment) which is an experimental activity that aims to determine a symptom or effect caused as a result of a certain treatment. Observations were made on 30 people in third trimester primigravida pregnant women and divided into 2 groups, namely the experimental group as many as 30 people. 15 people were given perineal massage treatment and the control group was 15 people who were not given perineal massage treatment.

Results: There is a difference in the incidence of birth canal tears in the experimental group with perineal massage therapy with the control group without perineal massage treatment. The statistical test results using the T test obtained a tcount value of 9.466 when compared to the ttable value (1.701), the tcount value is greater than the ttable value (9.466 > 1.701) which means there is a relationship between perineal massage and tear of the birth road.
INTRODUCTION

Maternal Mortality Rate (MMR) is one indicator that can describe the welfare of society in a country. The maternal mortality rate in the world in 2015 was 216 per 100,000 live births (WHO, 2015). MMR in Indonesia as many as 4,627 people, where the number increased by 8.9% from the previous year which was 4,197 people and in West Java province as many as 745 mothers with the proportion reaching 16.1% of total maternal deaths in the country (Kemenkes, 2021). MMR in Tasikmalaya Regency as many as 23 people (Kabid Kesmas DKPP, 2020).

Postpartum hemorrhage is the leading cause of maternal death worldwide with an incidence of 5% to 10% of all deliveries (WHO, 2015). In Indonesia, the incidence of postpartum hemorrhage as the main contributor is 40% (Kementrian Kesehatan, 2015). Postpartum hemorrhage is bleeding more than 500 cc that occurs after the baby is born vaginally or more than 1000 cc after abdominal delivery within 24 hours and before 6 weeks after delivery (Kemenkes, 2021).

Causes of postpartum hemorrhage are uterine atony, retained placenta, torn birth canal, retained placenta and blood clotting disorders (Simanjuntak, 2020). Postpartum hemorrhage due to tearing of the birth canal is a factor that causes the second highest maternal mortality rate in the world (Hanafi Wiknjosastro, 2008)

According to research conducted by (Anggraini & Anggasari, 2019; Widia, 2017) A birth canal tear is an injury to the birth canal that occurs at the time of the birth of a baby, either using a tool or not using a tool. Tear of the birth canal is influenced by several factors, namely maternal factors, fetal factors and auxiliaries. Mothers who have given birth should have an elastic birth canal, but in reality, multigravida mothers still experience tearing of the birth canal during delivery. This shows that multigravida alone is not enough to minimize tearing of the birth canal, and even having been through it does not guarantee that the birth canal / perineum becomes elastic.

According to Mongan in (Purnami & Noviyanti, 2019) the dangers and complications due to a tear in the birth canal are heavy bleeding, especially in second and third degree ruptures or if the rupture extends to the side or rises to the vulva regarding the clitoris. Infection can also occur due to a tear in the birth canal.

Tear of the birth canal (Perineal Rupture) can actually be prevented or does not need to occur, if the perineum is elastic, or the mother can push well, therefore there are many ways to prevent perineal tears. Efforts to prevent perineal tears that can be done include Kegel exercises and pregnancy exercises. In addition to pregnancy exercises and Kegel exercises, efforts to prevent tearing can be done with perineal massage techniques. This perineal massage is very easy to do and can be done by yourself without taking a long time, it can also be done every day and does not require an expensive fee (Anggraini et al., 2017).
between 30 primigravida deliveries and 10 multigravida deliveries. In primigravida deliveries, there were 25 people (83%), and 5 people (16.7%) who did not experience a torn birth canal. And in multigravida deliveries, the incidence of birth canal tears was 5 people (50%), and 5 people (50%) did not experience birth canal tears. This shows that birth canal tears are common in primigravida. The results of interviews with the coordinating midwife, several efforts have been made by birth attendants at the Puspahiang Health Center, Tasikmalaya Regency, namely by performing steneng at the time of expulsion of the baby's head, with the aim of minimizing the occurrence of birth canal tears. Therefore, in this study, a semi-experimental study will be conducted with a control group in which this control group will not be given the treatment, which is different from previous research studies, with the hope that the effect of perineal massage with tearing of the birth canal will be seen.

Based on the description above, the authors are interested in conducting research with the title "The Effect of Perineal Massage on Pregnant Women Primigravida Trimester III Against Birth Canal Tear in the Puspahiang Community Health Center, Tasikmalaya Regency."

RESEARCH METHODS

Quasy experimental research design (Quasy experiment) where 30 people were observed in third trimester primigravida pregnant women and divided into 2 groups, namely an experimental group of 15 people who were given perineal massage treatment and a control group of 15 people who were not given perineal massage treatment. The population in this study were primigravida pregnant women in the third trimester in December 2021 in the Puspahiang Health Center area, Tasikmalaya Regency as many as 30 people. The sampling technique in this study is total sampling with a sample of 30 people. The research was carried out in February 2022 in the Puspahiang Health Center area, Tasikmalaya Regency. The research variable consisted of the independent variable, namely perineal massage and the dependent variable was a birth canal tear. The instruments used were questionnaire sheets and checklist sheets as well as observation sheets that contained whether perineal massage was carried out in the third trimester for 1-2 minutes and during labor it would be observed whether there was a perineal rupture or not. Data analysis with univariate and bivariate methods was carried out using statistical test T-test Dependent sample t-test.

RESEARCH RESULTS

Table 1. Characteristics of Trimester III Primigravida Pregnant Women in the Puspahiang Health Center, Tasikmalaya Regency

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Eksperimen</th>
<th>Kontrol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20 Years</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>20-35 Years</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>&gt; 35 Years</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Gestational Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29-32 week</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>33-36 week</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>37-40 week</td>
<td>5</td>
<td>33,3</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD/SMP</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>SMA/SMK</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>PT</td>
<td>1</td>
<td>6,7</td>
</tr>
</tbody>
</table>

Source: Research Results, 2022

Table 1 shows that the experimental group has the highest score in the age category 20-35 years, as many as 7 people (46.7%) and the control group also has the highest score in the age category 20-35 years, as many as 8 people (53.3%). The experimental group's gestational age had the highest score in the 33-36 week category as many as 10 people (66.7%) and the control group also had the highest score in the 33-36 week category as many as 8 people (53.3%). The educational level of the experimental group has the highest score in the elementary/junior high school graduate category, which is 8 people (53.3%), while the control group has the highest score in the SMA/SMK category as many as 8 people (53.3%). The experimental group's highest score was in the non-working category as many as 9 people (60.0%) while the control group had the highest score in the working category as many as 10 people (66.7%).

Data Analysis

Univariat Analysis

Table 2 shows that the incidence of tearing of the birth canal in the experimental group, after being given perineal massage treatment in the Puspahiang Health Center area, Tasikmalaya Regency, the highest value was in the category of not torn as many as 14 people (93.3%), while in the control group without perineal massage the highest value was there in the category of second degree birth canal tear as many as 13 people (86.7%).
Tabel 2
Frequency Distribution of Birth Canal Tear in the Experimental Group After Perineal Massage and Control Group Without Perineal Massage

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Ripped Birth Way</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Not torn</td>
<td>14</td>
<td>93.3</td>
<td>0</td>
</tr>
<tr>
<td>Derajat I</td>
<td>1</td>
<td>6.7</td>
<td>2</td>
</tr>
<tr>
<td>Derajat II</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Research Results, 2022

Table 3 shows that the average incidence of birth canal tears in the experimental group of 0.1 is included in the category of not torn, while in the control group of 2.1 is included in the category of degree 2. Based on the results of statistical tests using the T test, the tcount value is 9.466 when compared with the value of table (1.701) then the value of tcount is greater than table (9.466 > 1.701), then Ho is rejected which means that there is an effect of perineal massage on primigravida pregnant women on birth canal tears.

Bivariat Analysis

Tabel 3
The Effect of Perineal Massage on Pregnant Women Primigravida Trimester III Against Birth Canal Tear

<table>
<thead>
<tr>
<th>Kelompok</th>
<th>N</th>
<th>Mean</th>
<th>Df</th>
<th>T hit</th>
<th>Sig</th>
<th>Ttab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eksperimen</td>
<td>15</td>
<td>0.1</td>
<td>28</td>
<td>9.466</td>
<td>0.000</td>
<td>1.701</td>
</tr>
<tr>
<td>Kontrol</td>
<td>15</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Results, 2022

RESEARCH DISCUSSION

 Characteristics of Trimester III Primigravida Pregnant Women in the Puspahiang Health Center, Tasikmalaya Regency

Age

Based on table 1 the characteristics of third trimester primigravida pregnant women based on age in the experimental group the highest score was aged 20-35 years as many as 7 people (46.7%) and in the control group the highest score was aged 20-35 years as many as 8 people (53.3%).

Women aged < 20 years or >35 years are at risk for perineal rupture because at the age of <20 years, a woman's reproductive function is not fully developed. Meanwhile, at the age of >35 years, a woman's reproductive function has decreased compared to normal reproductive function so that the possibility of postpartum complications, especially bleeding, will be greater (Hanafi Wiknjosastro, 2008).

According to (Hurloc & Elizabeth, 2011), that at the reproductive age (20-35 years) there is a readiness to respond maximally both in adjusting certain things and gradually decreasing with age. In addition, at their reproductive age they are more open to other people and usually they will exchange experiences about the same things they have experienced.

Gestasional Age

Based on table 1 the gestational age of the experimental group and the control group is in the category of gestational age between 33-36 weeks, each of which is 10 people (66.7%) and 8 people (53.3%).

According to (Ma'rifah & Aisyah, 2017; Novelia et al., 2022; Ratih et al., 2021) that the right time to do perineal massage is before delivery, which is after the gestational age is 34 weeks and above. In his research, it was explained that the benefits of perineal massage will be felt, especially if it is carried out for 3-4 weeks before delivery. Perineal massage is considered safe for a healthy pregnancy. Gestational age of more than 34 weeks has a lower risk of birth canal trauma in normal delivery and can statistically significantly reduce the incidence of episiotomy 16%.

The results of the same study conducted by (Savitri et al., 2015) that the incidence of perineal rupture in the intervention group after perineal massage was only 21.4% while in the control group 71.4% with p = 0.02 (<0.05).

According to Beckmann and Garrett (2011), antenatal perineal massage starting from 35 mg of pregnancy will reduce the possibility of perineal trauma that requires stitches. Perineal massage is also useful for relieving perineal pain after childbirth and warm tissue compresses on perineal massage for approximately 10 minutes will increase blood circulation so that the muscles in the perineal area are relaxed (not contracted or tense).

Level of education

Based on table 1 the education level of primigravida pregnant women in the third trimester in the UPTD Puspahiang Health Center, Tasikmalaya
Regency, in the experimental group the highest score of elementary/junior high school graduates was 8 people (53.3%) while in the control group the highest score of high school/vocational high school graduates was 8 people (53.3%).

According to (Notoadmojo, 2012), the level of education can affect a person's level of knowledge, a person's ability to accept and understand something is determined by the level of education they have. Acceptance and understanding of the information received by someone with high education is better than someone with low education.

Work

Based on table 1 the employment status of primigravida pregnant women in the third trimester in the Puspahiang Health Center, Tasikmalaya Regency, the highest score data in the experimental group was in the unemployed category as many as 9 people (60%) while in the control group the highest score in the working category was 10 people (66.7%).

Light activities are needed by mothers third trimester of pregnancy to help improve blood circulation and increase freshness and body fitness. Pregnant motherThose who have strenuous activities, should reduce their activities, considering the safety of pregnant women and fetuses is very risky (Hanifa & Wiyono, 2011)

Light activities during the third trimester of pregnancy such as pregnancy exercises and leisurely walks can facilitate the delivery process. Staying healthy during pregnancy is the dream of every pregnant woman. In addition to eating, exercise is one way to get that healthy state. Unfortunately, there are still many pregnant women who are afraid to exercise. They worry that exercise can cause interference with their pregnancy. In general, exercise is safe to do during pregnancy (Yuliarti, 2010). Pregnant women who have a healthy body condition can do moderate physical activity every day for 30 minutes or more (Muhimah, 2010). The results of this study are in line with research conducted by (Muhimah, 2010). Pregnancy women who have a healthy body condition can do moderate physical activity every day for 30 minutes or more (Muhimah, 2010). The results of this study are in line with research conducted by (Muhimah, 2010). The results of this study are in line with research conducted by (Muhimah, 2010). The results of this study are in line with research conducted by (Muhimah, 2010). The results of this study are in line with research conducted by (Muhimah, 2010).

One of the benefits of physical exercise during pregnancy is that it reduces the risk operative delivery, episiotomy and perineal laceration.

Women who work have the ability to make decisions to overcome the health problems they face. Therefore, women who act as workers as well as a wife and housewife generally have better health (Fatimah & Lestari, 2017; Najaan & Manampiring, 2011). A person who works can increase knowledge because experience and association as well as extensive social interaction (Notoatmodjo, 2012). This statement is in accordance with The results of research by (Permatasari et al., 2008) which states that the motivation of women to work is to broaden the association and add insight. Changes in knowledge will bring about changes in attitudes and behavior. Pregnant women can still work but the activities they do should not be too strenuous. Rest for pregnant women is recommended as often as possible. A pregnant woman is advised to stop her activities if they feel a disturbance in pregnancy. Jobs that require strenuous activity, standing for long periods of time, work in the machinery industry, or jobs that have environmental side effects must be modified (Sulistyawati, 2010).

The Effect of Perineal Massage in Third Trimester Primigravida on Birth Canal Tear in the Puspahiang Public Health Center, Tasikmalaya Regency.

Based on table 3, the statistical test results show the effect of perineal massage on third trimester primigravida pregnant women in the Puspahiang Public Health Center, Tasikmalaya Regency. This study is similar to the results of research conducted by (Anggraini & Anggasari, 2019; Mutmainah et al., 2019; Yuliarti & Candra Sari, 2021) that respondents who were treated with perineal massage 6 people (60%) did not experience perineal tears, while respondents who did not receive perineal massage had the highest score (70%) experienced birth canal tears.

Perineal massage is a massage performed on the perineum, the organ between the vagina and anus. Perineal massage can be done every day for 5-10 minutes in the last 5-6 weeks of pregnancy. Perineal massage performed during Pregnancy will help the tissues around the perineum become elastic (Saifuddin, 2011). The benefits of perineal massage can help stretch the inner tissues under the vagina and relax the pelvic floor muscles (sarwono, 2011). (Karlinah, 2021) also suggested that perineal massage is useful as a maternal

738

Perineal massage can stimulate connective tissue and collagen in the perineum, causing the perineum to become elastic, flexible and supple when the perineum is stretched during labor. For this reason, it is necessary to do perineal massage to help soften the perineal tissue. This theory is supported by research conducted by (Kusumawati et al., 2018) which concluded that the length of the second stage was shorter in mothers who did perineal massage compared to mothers who did not do perineal massage (Nurhamida Fithri & Simamora, 2022).

According to (Moe, 2020) perineal massage is one of the oldest and surest ways to improve health, blood flow, elasticity, and relaxation of the pelvic floor muscles. This technique, if practiced in the later stages of pregnancy, about six to eight weeks before delivery, will also help you recognize and familiarize yourself with the tissues your baby is going through. This technique, if practiced in the later stages of pregnancy, about six to eight weeks before delivery, will also help you recognize and familiarize yourself with the tissues your baby is going through.

Tear of the birth canal generally occurs in primigravida mothers because the birth canal has never been passed by the baby at all and the muscles are still stiff, but in multigravida mothers it is also possible to experience a torn birth canal. According to researchers, the incidence of tearing of the birth canal in multigravida is caused by straining that is not good, as is the case in taking a birthing position with the buttocks being lifted, or also the influence of stenteng. Mothers who have given birth should have an elastic perineum/birth canal, but in reality, multigravida mothers still experience tearing of the birth canal during delivery.

This shows that multigravida alone is not enough to minimize tearing of the perineum/birth canal, and even having been through it does not guarantee that the perineum/birth canal will be elastic. Gestational age of 35 weeks has a lower risk of birth canal trauma in normal delivery and can statistically significantly reduce the incidence of episiotomy 16%. The results of the same study were carried out by Savitri W, Ermatawi, (Savitri et al., 2015) that the incidence of perineal rupture in the intervention group after perineal massage was only 21.4% while in the control group 71.4% with p = 0.02 (< 0.05).

According to (Raleigh & Belvoir, n.d.) and (Ilmiyah, 1978), antenatal perineal massage starting from 35 mg of pregnancy will reduce the possibility of perineal trauma requiring stitches. Perineal massage is also useful for relieving perineal pain after childbirth and warm tissue compresses on perineal massage for approximately 10 minutes will increase blood circulation so that the muscles in the perineal area will relax (not contracted or tense). The results of this study are similar to those of (Kebidanan, 2018), namely perineal massage in the antenatal period can help reduce the risk of second and third lacerations.

According to Johanson, 2011 obstetrician from Nort Staffordshire Maternity Hospital, England, in (Saviti et al., 2015) noted that mothers who diligently do perineal massage since three months before delivery almost do not tear at the time of delivery. Even if the perineal tear occurs naturally, the wound will heal quickly.

(Yulianti & Candra Sari, 2021) suggests that when the mother is massaged the perineal tissue in the perineum becomes relaxed so that it can cause an increase in the elasticity of the birth canal which can facilitate the birth process and reduce the incidence of perineal tears. (Afdila & Saragih, 2021) found that perineal massage can also be used as a coping mechanism for mothers, namely to relieve fear and anxiety during childbirth because during pregnancy the tissue around the perineum has been massaged so that the tissue around the perineum becomes elastic.

According to (Danuatmaja, 2008) perineal massage carried out since the last months of pregnancy prepares the perineal skin tissue to be more elastic so that it is easier to stretch. In addition, it increases the elasticity of the vagina to open, as well as train 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 episiotomy, and reduce the use of other birthing aids.

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

Many pregnant women worry about perineal tears before giving birth, but this risk can be reduced by training the elasticity of the perineum. Mothers can massage the perineal area by means of giving lubricant to the fingers, placing the thumb on the perineum, gently and slowly pressing the perineum towards the rectum (anus), towards the side and doing this well and regularly (Prasetyorini & Sukses, 2020).
According to (Wahyuni et al., 2020) and (Aasheim et al., 2017) perineal stretching and tearing of the perineum during labor can weaken the pelvic floor muscles and vaginal walls, trauma to the perineum also causes discomfort and pain during sexual intercourse. So the need for perineal massage during pregnancy.

Stretching of the perineum during labor can result in positive changes if the perineum is elastic, flexible and flexible, the incidence of perineal rupture can be minimized or there is no perineal rupture at all (perineum intact) and negative changes if the perineum is inelastic, flexible and flexible then the stretch in the perineum will result in perineal rupture. Then one way This is done to avoid perineal rupture by doing perineal massage (Andari, Reka, 2020).

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 (Nurhamida Fitri & Simamora, 2022). This perineal massage makes it possible to deliver a baby with the perineum intact. Perineal massage is a technique of massaging the perineum during pregnancy or a few weeks before childbirth to increase blood flow to this area and increase the elasticity of the perineum. Increased elasticity of the perineum will prevent the incidence of perineal tears and episiotomy (Siregar, 2021).

CONCLUSIONS

In general, the characteristics of the respondents in this study were of childbearing age in the age category of 20-35 years and gestational age in accordance with the inclusion criteria of the study, namely in the third trimester. There was a difference between the control group and the experimental group, where in the control group without perineal massage on average there was a second degree birth canal tear, while in the experimental group there was minimal birth canal tear.

SUGGESTION

It is expected to prepare for her pregnancy before delivery both mentally, spiritually and also to be able to teach other pregnant women about perineal massage, to minimize the occurrence of tearing of the birth canal during delivery and as a health worker as a facilitator can cooperate with mothers in the delivery process by paying more attention to risk factors that can affect the incidence of spontaneous birth canal tears so that spontaneous perineal rupture can be prevented. This research can also be continued to further explore other complementary therapies that can prevent birth canal tears such as Kegel exercises.

BIBLIOGRAPHY


Indah Fitri Agustina, Risa Mundari, Herliana

https://doi.org/10.32584/jikm.v3i1.81  