Treatment of Perineal Massage Using Olive Oil to Prevention Perineal Laceration in Labour at RB. Kasih Ibu in Grogol

Shanty Natalia\textsuperscript{a,1,*}, Mihtakhur Rohmah\textsuperscript{a,2}
\textsuperscript{a} Lecturer STIKes Surya Mitra Husada Midwifery Division
\textsuperscript{1} sayashantynatalia@gmail.com; \textsuperscript{2} m1111ftaa@gmail.com
* Corresponding author

ABSTRACT
Perineal laceration occurs because the position of the perineum is tense so that when the baby's head comes out there is laceration in the perineum. The purpose of this study is to know the analysis of perineal massage result with olive oil on prevention of perineal laceration in labor at RB. Kasih Ibu Wonoasri Village Grogol District Kediri. The design of this study Quasy Experiment with Post test only with control group design. The population of this study all pregnant women gestational age \geq 36 weeks in RB. Kasih Ibu of Wonoasri Village, Grogol Subdistrict of Kediri Regency, with purposive sampling technique obtained sample 20 respondents. Independent variables was perineal massage with olive oil, the dependent variable is perineal Laseration. Data analysis using Mann Whitney U test. The result of this study was found that most respondents did not have perineal laceration, amount 7 respondents (70%) while in the treatment group, most of respondents had perineal laceration, amount 6 respondents (60%). The result of analysis using Chi Square test shows the value of p-value = 0.039 \textless \alpha = 0.05, so H0 rejected and H1 accepted which means there is influence of perineal massage result with olive oil on prevention of perineal laceration in labor at RB. Kasih Ibu Wonoasri Village Grogol District Kediri. Perineum massage using oil can be an alternative alternative to prevention of perineal laceration in maternal women because through massage the perineum exercise process to widen so as to increase the flexibility, while the olive oil content is useful in providing nutrients for skin tissue to remain soft and elastic.

Copyright © 2018 Joint International Conference
All rights reserved

1. INTRODUCTION

Labor is a process of expending the outcome of conception (fetus and placenta) that has been sufficient for months or almost months and can live outside the womb through the birth canal or through another birth canal with help or without assistance (Manuaba, 2010). In vaginal delivery is often accompanied by lacerations. Laceration of the perineum occurs in almost all of the first coin and is not uncommon in subsequent labor. In some cases the lacerations become heavier, the vagina undergoes laceration and the perineum is often torn mainly on primigravids, laceration may occur spontaneously during vaginal delivery. Acute puerperal bleeding due to neglected lacerations can lead to significant blood loss but slowly for hours (Oxorn, 2010).

Gracia et al, in a 2007 UK study, found that of a total of 1951 spontaneous vaginal births, 57% of mothers got sutures (Boyle, 2009). Nationally, according to a study conducted by Ikwan (2013), 1.5% of maternal ladies were subjected to 3rd and 4th degree lacerations, while 86% of mothers experienced laceration and only 12.5% of mothers did not experience lacerations. According to Yudiantara (2014), the incidence of lacerations in primipara maternal women reaches 18% and 40% of them occur in degree 4. This gives problems of puerperal infections, due to infection of the perineum. Wilwatikta (2011), states that 28% of perineal laceration events develop into postpartum infections. Preliminary study results conducted at RB. The love of Ibu Wonomasi Village, Grogol Subdistrict, got the average number of deliveries in 1 month is 30-40 births. Data in February 2017 of
37 deliveries of which 16 (43%) experienced perineal lacerations caused by large babies (> 2500 grams) (7 persons), fetal heads were born too fast (3), rigid perienes (4 persons) and delivery shoulder dystocia (2 persons). The results of informal interviews with 7 mothers who had perineal laceration revealed that the whole did not know about vaginal lip massage. The efforts that have been done to prevent perineal laceration is done by taking the most comfortable position and asked the mother to relax more in the delivery.

Perineal laceration occurs because of the tense perineal position so that the baby's head gets a prisoner that is too strong. This causes when the perineal pivot swirl will get strong pressure from the baby and cause perineal laceration. The more the perineal stress the greater the likelihood of the laceration. Laceration of the perineum if not directed and controlled by the selection of meneran position and the action of episotomy can cause irradiated perineal laceration and tend to cause the occurrence of bleeding in large numbers which result in the occurrence of shock that can threaten the mother's life (Prawirohardjo, 2010). Laceration of the perineum is a laceration that occurs during labor and is caused by several factors such as the position of labor, the manner of meneran, the delivery of labor and the weight of the newborn (Waspodo, 2011). Laceration of the perineum is influenced by several factors, namely maternal factors, fetal factors and auxiliary factors. Maternal factors include rigid perineum and edema, primigravida, pelvic floor narrowing, flexibility of the birth canal, overpowering, precipitous partus, vagum extraction with action such as vacuum extraction, extraction of forceps, extracted versions and embryotomy, velocity of the pelvis and scar tissue of the perineum and vagina. Fetal factors include large fetuses, abnormal positions such as occipitoposterior, facial presentation, forehead presentation, butt presentation, shoulder dystocia and congenital anomalies such as hydrocephalus. Rescue factors include how to lead the strain, how to communicate with the mother, the skills of holding the perineum at the time of head expulsion, episiotomy and position meneran (Mochtar, 2010).

To minimize the incidence of perineal laceration, one should be prevented by perineal massage. Perineal massage is one way to improve the health, blood flow, elasticity, and relaxation of pelvic floor muscles. This technique, when trained in the late stages of pregnancy (starting week 34) before delivery, will also help recognize and familiarize yourself with the tissue to be relaxed and the part that the baby will pass (Mongan 2007). The benefits of perineal massage is to reduce the incidence of laceration, but if the perineum laceration is projected not to exceed 2 degrees (vaginal mucous membranes, perineal skin and perineal muscle) If perineal laceration occurs, perineal massage can accelerate the perineal healing process (Ommolbanin, 2014). According to Riningsih (2014) based on research published in the American Journal Obstetrician and Gynecology concluded that perineal massage during pregnancy can protect the perineum function at least in 3 months postpartum. This perineal massage should always be explained to pregnant women so they know the benefits of perineal massage. Perineum massage is very safe and harmless. On the implementation of perineal massage oil is required as a lubricant. In this study the oil used is olive oil. This is based on some considerations that the main content in olive oil is oleic acid and vitamin E. Both have important roles for skin health. Vitamin E also plays a role to help improve skin elasticity and become a natural antioxidant that can ward off free radicals(Surtiningsih, 2015). Implementation of perineum massage combined with olive oil is expected to increase the elasticity of the perineum optimally. Olive oil provides an analgesic effect that gives a comfortable sensation to the user so that the maternal mother is more relaxed in labor and the perineum is not tense during labor and reduces the risk of laceration (Yuniati, 2014 ).

Research Objectives

Mengetahui perienum results massage with olive oil (Olive oil) on the prevention of perineal lacerations during labor at RB. Kasih ibu Wonoasri Village Grogol District Kediri District.

Vol. 2, No. 2, July 2018, pp. 919-926

920
II. METHODS

Research design

The research design used in the research is a *case-control* comparative study, this type of research is the opposite of cohort study, ie the researcher performs the measurement on the dependent variable first (effect: perineal laceration), whereas the independent variable is retrospectively traced to determine whether or not the factor (independent variable) plays a role in this *perineum massage* with olive oil.

Population and Sample

The population in this study is all pregnant women gestational age ≥36 weeks in RB. The mother of Wonoasri Village, Grogol Subdistrict, Kediri Regency with 22 pregnant mothers, with *purposive sampling technique*, there were 20 respondents divided into 2 groups: treatment group and control group.

Variable and Data Analysis

Independent variable in this research is perineum massage with olive oil and gkan se variable dependen in this study is 1 perineum assertion. Research using standard instruments operating procedures (SOP) to perform *massage perienum* as well as an observation sheet to record the respondent's characteristic and perineal laceration events.

Analysis the data used to test the effect of variables using the test *Mann-Whitney U test*. In the calculation process is assisted by using the help of *Statistic Programe for Social Science*(SPSS) Version 1 7 at a significant level of 5% (α = 0.05) so that the conclusion of the analysis as follows:

a. If the value of \( P \leq \alpha \) then H0 is rejected which means there is a difference of *perineum massage* results with olive oil against the prevention of perineal laceration in labor in RB. Kasih ibu Wonoasri Village Grogol District Kediri District.

b. If the value of \( P > \alpha \) then H0 is accepted which means there is no difference of *perineum massage* result with olive oil on prevention of perineal laceration in labor in RB. Kasih ibu Wonoasri Village Grogol District Kediri District.

III. RESULT

Characteristics of Respondents

Table 1. Characteristics Responden Berdasarkan Age In pregnant women ≥36 weeks gestation in RB. Kasih ibu Wonoasri Village Grogol District Kediri Date 16 August - 7 September 2017

<table>
<thead>
<tr>
<th>Mother Age</th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>20 - 25 years</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>26 - 30 years</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>31 - 38 years</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>amount</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 1 it is known that half of respondents treatment group aged 26-30 years, ie 5 respondents (50%), while in the control group half of respondents aged 26-30 years, ie 5 respondents (50%).
Table 2. Characteristics of Respondent B based on parity in pregnant women gestational age ≥36 weeks in RB. Kasih ibu Wonoasri Village Grogol District Kediri Date 16 August - 7 September 2017

<table>
<thead>
<tr>
<th>Parity</th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Primigravida</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>Multigravida</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>amount</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on Table 1 it is known that half of respondents in the treatment group aged 26-30 years, i.e., 5 respondents (50%), while in the control group half of respondents aged 26-30 years, i.e., 5 respondents (50%).

Variable Characteristics

Perineal Laceration in labor in groups receiving perienum massage with olive oil

Table 3. Perineal Laceration at delivery in RB. Kasih ibu of Wonoasri Village Grogol Subdistrict Kediri Regency in group get massage perienum with olive oil Date 16 August - 7 September 2017

<table>
<thead>
<tr>
<th>Perineal Laceration</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happen</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Not occur</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>amount</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on Table 3 it is known that most respondents in the treatment group did not experience perineal laceration, as many as 7 respondents (70%).

Perineal Laceration in labor in the group that did not get the massage perienum with olive oil

Table 4. Perineal Laceration at delivery in RB. Kasih ibu of Wonoasri Village Grogol Subdistrict Kediri Regency in group not get massage perienum with olive oil Date 16 August - 7 September 2017

<table>
<thead>
<tr>
<th>Perineal Laceration</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happen</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>Not occur</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>amount</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4 shows that most respondents in the control group had perineum laceration, 6 respondents (60%).

IV. DATA ANALYSIS

Table 3. Perienum massage with olive oil (Olive oil) against the prevention of perineal laceration in labor in RB. Kasih ibu Wonoasri Village Grogol District Kediri Date 16 August - 7 September 2017

Cross tabulation showed that respondents with perineal laceration events in the control group in the category occurred whereas perineal lacerations that had been given Perienum massage using olive oil (Olive oil) in the category did not happen, that is 4 respondents (40.0%). Mann Whitney U analysis results can show p value = 0.039 <α = 0.05, then Ho is rejected and H1 is accepted which means there is influence perienum massage with olive oil (Olive oil)
oil) against the prevention of perineal laceration in labor in RB. Kasih ibu Wonoasri Village Grogol District Kediri District.

V. DISCUSSION

Perineal Laseration in Labor in RB. Kasih ibu of Wonoasri Village Grogol Sub-District Kediri in group get massage perienum with olive oil

Perineal Laseration at delivery in RB. Kasih ibu of Wonoasri Village Grogol Sub-District Kediri in group get massage perienum with olive oil it is known that most respondents did not occur perineal laceration, as many as 7 respondents (70%).

Laseration of the perineum is a laceration that occurs during labor and is caused by several factors such as the position of labor, the manner of meneran, the delivery of labor and the weight of the newborn (Waspodo, 2011). According to Prawirohardjo, (2010) laceration of the perineum occurs because the position of the tense perineum so that the baby's head to get a prisoner that is too strong. This causes in the event of a pivot swing, the perineum will get strong pressure from the baby and cause perineal laceration. The higher the perineal stress the greater the likelihood of the laceration. To minimize the incidence of perineal laceration, one should be prevented by perineal massage. Perineal massage is one way to improve the health, blood flow, elasticity, and relaxation of pelvic floor muscles. This technique, when trained in the late stages of pregnancy (starting week 34) before delivery, will also help recognize and familiarize yourself with the tissue to be relaxed and available for the baby (Mongan 2007).

In the group of pregnant women who received a perienum massage with olive oil starting from 37 weeks gestation results obtained most respondents (70%) did not occur perineal laceration. Reduced laceration of the perineum can occurs because at the time the mother performed massage perineum, tissue on the perineum becomes accustomed to widening so it can cause decreased road elasticity born who can ease the process of childbirth as well reduce perineal rupture. The results of this study prove that the benefits of perineal massage can help soften the perineal tissue, the network will open without resistance at the time of delivery and may facilitate the passage of the baby. So far Massage or massage perienum using olive oil no side effects are found as long as they meet indications and contraindications, so the study is safe to do. However, the results of the study also showed that in the treatment group, there were 3 respondents who still experienced laceration, this could be due to the frequency and duration of perineal massage performed by the mother not in accordance with the established procedure, but also can be caused by baby weight factor, and the casting technique performed.

The results showed that there were respondents of treatment group with age 31-38 years old which is high risk age perineum laceration because reproduction function has decreased but in fact showed all respondents did not experience laceration. This shows that the action of perineum massage with olive oil can help improve the ability of the perineum to develop when doing labor although it is undeniable there are also other factors that influence the absence of laceration is the helper factor and the technique of meneran.

Perineal Laseration in Labor in RB. Kasih ibu Wonoasri Village Grogol District Kediri in the group that did not get massage perienum with olive oil (Olive oil)

Perineal Laseration at delivery in RB. Kasih ibu of Wonoasri Village Grogol Sub-District Kediri in group that do not get massage perienum with olive oil it is known that most respondents perineum laceration occurred, as many as 6 respondents (60%).

Perinium laceration occurs because of the tense perinium position so that the baby's head gets a prisoner that is too strong. This causes in the event of a perinium spinning of the sword will get strong pressure from the baby and cause perinium laceration. newborn body (Waspodo, 2011). The origin of the journey and the consequences of perineal laceration are perineal muscles that have not been fully stretched (stiff) getting pressure from the fetal head that begins to fall at the pelvic floor. This results in the fetal head suppressing the perineum. Thus the perinal muscle of the perineum is torn and bleeding occurs (Sudarti, 2014). Laceration of the perineum if not directed...
and controlled by choosing the position of meneran and episotomy action can cause irradiated perineal lacerations and tend to cause the occurrence of bleeding in large numbers which result in the occurrence of shock that can threaten the life of the mother.

Perineal laceration occurs in almost all first deliveries and not infrequently in subsequent labor. This happens because of the condition of the perineum is still rigid or less ready in experiencing the stretch due to the process of labor resulting in lacerations due to not ready perineum stretching. Perineal laceration generally occurs in the midline and may become widespread if the fetal head is born too soon, the fetal head passes through the lower pelvic door with a size larger than the width of the perineum. The occurrence of laceration in the perineum will result in the occurrence of bleeding. The higher the degree of perineal injury the more severe the occurrence of bleeding this condition would be unfortunate if not made efforts to control the laceration. The tense of the perineum leads to the emergence of pressure on the fetal head. The more tense the mother is the more rigid the perineum so the greater the likelihood of degree of perineal injury. This happens because most primigravida moms are less ready to undergo labor due to excessive anxiety levels that can result in tension in the muscles of the birth canal.

The occurrence of perineal laceration is influenced by a variety of factors including, newborn weight, meneran technique, birth attendant and labor velocity. In this study there were respondents in the control group who did not experience lacerations have primigravida parity status, it can be due to different techniques of casting performed by the mother and the weight of newborns. In addition, it is related to the factors that help the birth, there is a possibility that the leadership of labor is still less than the maximum, for example, in providing guidance to meneran so that perineum laceration occurs this is because in this study that acts as a helper birth is not always the main midwife but also the midwife assistant.

Judging from the parity, it is known that respondents with primigravida perineum laceration occurred, as many as 6 respondents (60.0%). As a result of perspectives, especially in primiparas, there is a widespread injury to the vulva surrounding the vaginal introitus, which is usually not present but may occasionally produce considerable bleeding (Prawirohardjo, 2010). In primigravida or women who first gave birth perineum usually can not withstand a strong voltage due to erineum conditions are still rigid so torn on the front edge. This happens because of lack of stimulation to increase the ability of the perineum to stretch for example the mother is less frequent in sexual intercourse.

Results Perineum massage With Olive Oil (Olive oil) Against Prevention Perineal Laser Laceration in RB. Kasih ibu Wonoasri Village Grogo District Kediri District

The results of massage perium analysis with olive oil (Olive oil) against the prevention of perineal laceration in labor. Kasih ibu Wonoasri Village Grogo District Kediri District based on Chi square test result show p value = 0.039 < α = 0.05, hence Ho is rejected and H1 accepted which mean there is influence of perium massage with olive oil (Olive oil) against prevention of perineum laceration in labor in RB. Kasih ibu Wonoasri Village Grogo District Kediri District.

Laseration of the perineum is cause of second bleeding after uterine atony, this is often the case in primigravida or in the perineum primigravida still intact, yet passed by the fetal head so will perineum rupture easily occurs. Network the perineum in primigravida is more dense and more resistant than multiparous. Laser wound usually mild but can also occur injuries which can cause bleeding thus endangering the mother’s soul (Ministry of Health, 2011). Oil content is very good to treat skin health, in addition olive oil also contains oleocantal, cyclooxygen, which is an ACE-inhibitor as an anti-inflammatory and analgesic. As a moisturizing agent, olive oil serves as emollient and ollu sif so it can smooth, soften the skin and increase the elasticity of epidermal tissue (Viola, 2009). More perineal laceration events many occur in the group of mothers at risk high (age <20 years or> 35 years) compared with the group of mothers who did not risk (age 20-35 years old) (Sudarti, 2012). But according to Mochtar (2010) despite normal maternal age if not exercising and not diligently intercourse can experienced laceration during labor due making DNA and other molecules stick together and twist, this will reduce the elasticity of proteins and molecules, consequently the elasticity of tissue on the perineum decreases.
The occurrence of perineal lacerations due to perineum unpreparedness can be minimized through *perineal massage* with olive oil. The existence of a significant influence between perineal massage with olive oil to the occurrence of laceration due to the pijijatan process occurs increased perineal elasticity it is seen when researchers make observations made on the first day and day 14. In addition to the massage the perineum also helps to prepare the physical mother at the time of preparing for perineal tissue to face situations during labor, especially at the time baby's headstarts out so that the perineum is more relax. While olive oil is used as a lubricant in the massage process is useful in providing nutrients and make the epidermal tissue becomes elastic. High content of vitamin E and A in olive oil is beneficial in providing nutrients needed for skin regeneration of cells, good cell regeneration process will help maintain the elasticity and softness of the skin so that when performed *perienum massage* perineum tissue will be trained to be wide while the oil olives will bend the skin and prevent the occurrence of inflammation because of the antioxidant content. The combination of both able to make perineum to be elastic and prevent the occurrence of trauma when doing the process of labor, if there is a laceration lashed the degree of laceration will not be too heavy.

Viewed from the age known that half of respondents in the group who get massage perineum with olive oil aged 26-30 years, ie 5 respondents (50%). In this study efforts to improve elasticity through exercise and intercourse have been replaced with *perienum massage* so as to prevent the occurrence of lacerations.

VI. CONCLUSIONS AND RECOMMENDATIONS

**Conclusion**

1. There is a group that gets massage *perienum* with olive oil it is known that most respondents with perineal laceration in the category did not occur, that is 7 respondents (70%).

2. There is a group that does not get a massage *perienum* with olive oil it is known that most respondents with perineal laceration in the category occurred, ie 6 respondents (60%).

3. There is the effect of *perienum massage* with olive oil (*Olive oil*) against the prevention of perineal laceration in labor in RB. Love of Mother of Wonoasri Village, Grogol Sub-district of Kediri Regency (*p = 0.039 < α = 0.05*).

**Suggestion**

1. For Research Sites

   Expected to provide socialization about *perienum massage* techniques with olive oil to pregnant women to prevent the occurrence of bleeding caused by perineal laceration during labor.

2. For Health Institution

   Expected to m Enhancing understanding of mothers about *perienum massage* through education health as an effort to improve mother's independence in performing *perienum massage* athome.

3. For Further Researchers

   It is expected to develop this research by examining other alternatives to prevent lacerations such as correct casting techniques, push techniques.

4. For Respondents

   Expected to apply *perienum massage* with olive oil (*Olive oil*) in the next pregnancy.
VII. BIBLIOGRAPHY


