The Correlation of Pregnancy Exercise with the Incidence of Primigravida’s Perineal Rupture at Kusuma Pertiwi Clinic Kepung Sub District Kediri Regency

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A B S T R A C T

The perineal rupture is a tear that occurs during labor, postpartum hemorrhage may result from perineal rupture. Pregnancy exercises can relax the pelvic floor muscles, reduce tension, strengthen and maintain muscle elasticity, elastic Perineum can facilitate the birth of a baby without much tearing the birth canal. The purpose of this research is to know the relationship of pregnancy gymnastics with the incidence of perineum rupture primigravida at Kusuma Pertiwi Clinic Kepung District Kediri Regency.

This research uses correlational analytic (correlational study) research design, using a retrospective cohort approach at Kusuma Pertiwi Clinic Kepung District Kediri District on August 2 - August 26, 2017. Independent variables in this study pregnancy exercise and dependent variable incidence of perineum rupture, with a population of 48 postpartum woman using simple random sampling technique obtained a sample of 33 respondents postpartum mother. Instrument used Medical Record (Attendance List) and Medical Record (Partograf). This study uses Chi-Square statistical test with a significance level of 0.05.

The result showed that almost all respondents (84.8%) had regular pregnancy exercise criteria of 28 respondents and almost all respondents (81.8%) did not rupture perineal criteria of 27 respondents. The analysis of this study shows that there is relationship between pregnancy exercise with perineal rupture primigravida at clinic of Kusuma Pertiwi Kepung District Kediri Regency, value (ρ value = 0,000 <α = 0.05), with strong relationship level (0,707).

Pregnancy exercise can relax the pelvic floor muscles, reduce tension, strengthen and maintain elasticity of the perineal muscles, exercise posture and practice breathing so indirectly can prevent perineal rupture. In order not to happen perennial ruptures pregnant women should follow pregnancy exercise.

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I. INTRODUCTION

Pregnancy exercise is therapy exercise motion for prepare mother pregnant, physical or mental on labor fast, safe and spontaneous. Benefits gymnastics pregnant in pregnancy among others that is reduce complaints moments pregnancy take place. Corresponding with theory exercise in pregnant it says perfect if do regular at least once aweek or four time in 1 month since 22 weeks pregnancy to approaching labor (Anggraini, 2010).

The perineal rupture is rips that occur when labor and caused by some factor among other positions labor, way of straining, leadership labor, weight of new born baby and state of the perineum (Dorlan, 2010).
Post bleeding partum resulting perineal rupture becomes cause primary 16% of deaths mother in Indonesia. On a primipara or a new person first gave birth when happen event head born usually no could hold back strong voltage, so torn on the perineum. Injuries usually light but sometimes happen too extensive wounds and could cause bleeding. As effect labor especially on a primiparas, ordinary arise wounds on vulva around normal vaginal introitus no in will but sometimes biased arise many bleeding (Prawirohardjo, 2008).

The perineal rupture is affected by some factor that is factor maternal, factor fetus, and factor helper. Maternal factors include the fragile perineum and edema, primigravida, narrowness door underpelvis, stiff perineal muscles and thick, straining too strong, way pushing wrong, partus precipitate, labor with action. Factor fetus covers fetus large, abnormal position, dystocia shoulder, and anomaly congenital as hydrocephalus. Factor helper covers way lead straining, way communicate with mother, skill holding the perineum on moment expulsion head, episiotomy and position meneran (Ariyanti, 2008).

Gymnastics pregnant could relax muscles basic pelvis, reduce tension, strengthen and maintain elasticity muscle perineum, train attitude body and train Respiratory. So that on no directly could prevent perineal rupture caused by maternal factor is the fragile perineum and edema, primigravida, narrowing door under pelvis, stiff perineal muscles and thick, push too strong, way tries wrong. The elastic perineum could make it easy birth baby without many ripped off Street born, without or a little stitches and helpful for strengthen the vaginal muscles and surrounding (perineal) as readiness for labor, so could influence condition of the perineum that can cause perineal rupture (Maryunani, et al., 2011).

Gymnastics pregnant composed from various movement of gymnastics, The kegel one of part gymnastics pregnancy is good when do in a routine way, it could polish the perineum. Flexible muscle very required because usually mother pregnant hit anxious and panic when in birth. Gymnastics pregnant done since age pregnancy 22 weeks and it could prevent occurrence perineal rupture. Besides that perineal rupture as well could prevented with perineal massage, use manufer right hand for control baby birth, lead labor with correct by power, in the moment baby’s head pushing the vulva with a diameter of 5-6 cm, guiding mother for cast slowly and Stop for rest or breathe with fast (Anggraeni, 2010).

From the background back above researchers interested for researching relationship gymnastics pregnant with rupture perineum on primigravida.

II. METHOD

This research uses correlational analytic (correlational study) research design using a retrospective cohort approach at Kusuma Pertwi Clinic Kepung District Kediri District on August 2 - August 26, 2017. Independent variables in this study pregnancy exercise and dependent variable incidence of perineum rupture, with a population of 48 postpartum women using simple random sampling technique obtained a sample of 33 respondents postpartum mother. Instrument used Medical Record (Attendance List) and Medical Record (Partograf). This study uses Chi-Square statistical test with a significance level of 0.05.
III. RESULTS AND DISCUSSION

1). General Data

a) Characteristics of Respondents by Age

Diagram 1. Characteristics of Respondents by Age

Based on diagram above is known that from 33 respondents obtained almost all respondents (90.9%) aged 20-35 years as many as 30 respondents.

b) Characteristics of Respondents by Education

Diagram 2. Characteristics of Respondents by Education

Based on diagram 2 above note that from 33 respondents obtained most respondents (54.5%) high school education as many as 18 respondents.

c) Characteristics of Respondents by Work

Diagram 3. Characteristics of Respondents by Work

Based on diagram 3 above note that from 33 respondents obtained most respondents (57.6%) private employment that is as many as 19 respondents.
B) SPECIFIC DATA

1) Distribution Frequency Gymnastic Pregnancy at Kusuma Pertiwi Clinic Sub District Kepung Kediri Regency

Table 1. Distribution Frequency Gymnastic Pregnancy at Kusuma Pertiwi Clinic Sub district Kepung Kediri Regency

<table>
<thead>
<tr>
<th>Criteria Gymnastic Pregnancy</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>28</td>
<td>84.8</td>
</tr>
<tr>
<td>Irregular</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 1 results showed almost all respondents (84.8%) have criteria gymnastic pregnancy regularly as much as 28 respondents.

2) Frequency Distribution of Perineum Rupture in Primigravida at Kusuma Pertiwi Clinic Sub district Kepung Kediri Regency

Table 2. Frequency Distribution of Perineum Rupture in Primigravida at Kusuma Pertiwi Clinic Sub district Kepung Kediri Regency

<table>
<thead>
<tr>
<th>Perineum Rupture Criteria</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree 1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Degree 2</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Degree 3</td>
<td>2</td>
<td>6.1</td>
</tr>
<tr>
<td>No rupture</td>
<td>27</td>
<td>81.8</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on the results of the research contained in the table above shows almost all respondents (81.8%) criteria do not rupture perineum as much as 27 respondents.

3) Analysis of Pregnant Gymnastic Relation With Perineum Rupture at Primigravida at Kusuma Pertiwi Clinic Sub district Kepung Kediri Regency

Table 3. Analysis of Pregnant Gymnastic Relation With Perineum Rupture at Primigravida at Kusuma Pertiwi Clinic Sub district Kepung Kediri Regency

<table>
<thead>
<tr>
<th>Gymnastics Pregnancy Criteria</th>
<th>Perineum Rupture Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degree 3</td>
<td>Degree 2</td>
</tr>
<tr>
<td>Spasmodic</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Regular amount</td>
<td>2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

ρ Value = 0.000

α = 0.05
Based on above cross tabulation showed from 38 respondents got almost all respondents who do gymnastics pregnant and did not rupture as much as 27 respondents (81.8%) and a small part of respondents who do not regularly do pregnancy exercise rupture degree 2 as many as 3 respondents (9.1%).

Results of research analysis of the relationship gymnastics pregnant with rupture of perineum at primigravida clinic of Kusuma Pertiwi Kecamatan Kepung Kediri Regency, that is from statistical test result using chi-square is got value nilai value 0,000 <α (0,05) this indicates that Ho is rejected H1 accepted, meaning there is relationship of gymnastics pregnant with perineal rupture on primigravida at the clinic Kusuma Pertiwi Kecamatan Kepung Kediri District Kediri. The value of coefficient correlation is 0.707 in the positive relationship category of positive relationship because it is in the range of correlation value 0.60-0.799.

IV. DISCUSSION

A) Identification of Pregnant Gymnastic at Kusuma Pertiwi Clinic Kecamatan Kepung Kediri Regency

Based on empirically conducted in August 2017 carried out at the Clinic Kusuma Pertiwi Kepung Kediri District of pregnancy exercise undertaken by the respondents note that a total of 33 samples were obtained the majority of respondents (84.8%) have regular pregnancy exercise criteria as many as 28 respondents.

Pregnant gymnastics performed pregnant women useful for the birth process such as p is a place a baby must pass by when childbirth , exit coitus or vagina and anal hole. These pelvic floor muscles must be elastic for a natural baby delivery so that during relaxation they will be stretched to comfortably skip the baby, then contraction to support the pelvic organs after the baby is born. With the execution of gymnastics hamil it will be useful when labor among which: The pelvic floor muscles are often trained will strengthen the muscles of the pelvic floor, improve the flow of blood to the vagina and rectum that can help when the birth process that is easier for the baby's birth without a lot of tearing of the birth canal and restore perineal muscle elasticity (Kirana, 2013).

According to the opinion of the researcher bekaitan with pregnant gymnastics conducted by mother in this research that most of respondent (84,8%) have criterion of pregnant pregnant woman in this research have appropriately describe how mother should prepare labor by following gymnastics gym regularly which can support fitness and elasticity of the pelvic floor muscles so as to sustain the smoothness of labor without much tearing through the birth canal and restoring the elasticity of the perineal muscle .

In addition, researchers also argue, by following gymnastics pregnancy on a regular basis can reduce complaints during pregnancy. Pregnancy gymnastics is said to be perfect if done regularly, through this gymnastics can trainbreathing techniques to deal with labor so that when labor arrived maternity can apply it because it has been doing breathing exercises while following the routine of pregnancy exercise. And maternal mothers do not have to worry about the intake of oxygen into the body and the fetus will be reduced, because maternity has mastered the technique of labor properly. Regular pregnancy exercises done mother makes the muscles more relaxed. As the age of pregnancyincreases , the body must become stronger to support the growing stomach. Generally, an increasingly pregnancy will cause pain in some parts of the body. Gymnastics pregnant can routinely train the muscles in the waist, pelvis and thigh crease so that more flexible and relaxed so that the feeling of aches and pain is reduced.

Based on the results of research contained in diagram 4.2 it is known that from 33 respondents obtained most respondents (54.5%) high school education as many as 18 respondents. Factors underlying mothers follow regular exercise pregnancy associated with educational factors. This is reinforced by Herawati's (2009) theory, education leads people to do and fills their lives to achieve safety and happiness, with a high education will affect the knowledge and ways of thinking a person so that pregnant women can choose and do what is best during pregnancy pregnancy exercise. Through the experience of mother who previously only tried to follow pregnancy exercise so that mother can feel the benefits of pregnancy exercise (Herawati, 2009).
The existence of regular pregnancy gymnastics criteria found in most high school education level in this study belongs to higher education than primary and junior high school education, indirectly affect the behavior shown by pregnant women as support during pregnancy and childbirth one of them behavior will follow regular activity pregnancy exercise because following pregnancy exercise mother can feel the benefits of pregnancy exercise. With a high education will be accompanied by knowledge and understanding more competent than low education including knowledge and understanding in following the activities of pregnancy exercise for pregnant women.

B) Identification of Perineum Rupture at Primigravida at Kusuma Pertiwi Clinic sub District Kepung Kediri Regency

Based on empirically conducted in August 2017 which was held in the District Pertiwi Kepung Kusuma Clinic Kediri by rupture of the perineum is known that a total of 33 samples were obtained the majority of respondents (81.8%) did not rupture perineum criteria as much as 27 respondents.

Factors that cause perineum rupture include the first is the mother factor that is at the time of pregnancy and perasalinan. At the time of pregnancy is influenced by knowledge, education, prenatal care and mother's physical condition. While the labor is affected by parity, the way meneran, and the condition of the perineum. Knowledge and education are interrelated because with a high education it will add to the broad knowledge that pregnant women can choose to do what is best during their pregnancy as well as to follow pregnancy exercises. Parity is the number of pregnancies capable of producing a way of life outside the womb (more than 28 weeks). How to meneran is at the time of birth required power / power from the mother in the form of impulse meneran. The impulse to rise appears along with the emergence of his or the contractions of the uterus (Ariyanti, 2008). Perineal conditions that allow perineum rupture (Salmah, 2006) include: if the signs of vaginal rupture become apparent, if the overly stretched perineum is seen to tear, the perineum is stiff and thick, and the perineum is fragile and oedem.

Factors causing the second perineum rupture of the fetus due to the weight factor of newborn and presentation, according to Ariyanti (2008) states that large babies can cause the incidence of perineal rupture. Presentation is used to determine the part that is below the uterus found in palpation or internal examination (Wiknjosastro, 2002). The third factor of perineal rupture is vaginal delivery factor which is due to extraction vacuum, cunam extraction, embryotomy, and presipitasitus delivery. Factors that cause fourth rupture of the perineum is a factor of birth help, birth attendant is a person who is able and authorized in giving birth care (Ariyanti, 2008).

In the opinion of the researchers, between the theory and the facts in the study that most of the criterion criterion criteria do not rupture the perineum, this is because the esperent that does not have perineal rupture is possible due to the correct position setting at the time of delivery, the respondents who do not have perineal rupture are mostly regular in following pregnancy exercise during her pregnancy. As in pregnancy exercise, the mother gets proper positioning training during delivery, pregnancy exercise, perineum message, and prenatal yoga. Elasticity of pelvic floor muscles, mother's knowledge is also good because mother knows the technique of breathing, doing contraction and relaxation when the emergence of pain at the time of opening. Respondents who regularly follow pregnancy exercise will get effective result.

Based on research by Azizah (2015), there was a significant correlation between pregnancy exercise with spontaneous perineum rupture, clarified in cross tabulation showed that some of the respondents following pregnancy exercise got perineal rupture showed most did not have perineal rupture, this is because pregnancy exercise performed respondents can reduce the occurrence of spontaneous perineal rupture.

Based on the results of the research can be seen that the diagram 4.1 mentions of 33 respondents obtained almost all respondents (90.9%) age 20-35 years as many as 30 respondents.

Memory or memory of a person is one of them influenced by the age of a person, can affect the increase of knowledge obtained, but at the age or before the age of further ability to accept or recall a reduced knowledge (Notoatmodjo, 2012). Regarding the general age, that age is safe for pregnancy and childbirth is 20-35 years. Where women at the age of 20-35 years of physical,
especially reproductive organs and muscle tone and muscle tone as a whole are ready to reproduce, (Bobak, 2009).

In relation to the age of the respondents, in the opinion of the researcher can be explained that the safe age for pregnancy is in accordance with most of the respondents in this study where women at the age of 20-35 years of physical, especially reproductive organs and muscle tone muscle and psychological as a whole is ready for reproduce so that the rupture of the perenium is less than that of the perennial rupture.

C) Analysis Correlation of Pregnant Gymnastic with Perineum Rupture at Primigravida at Kusuma Pertiwi Clinic Sub district Kepung Kediri Regency.

Based on the above crosslinking table shows from 38 respondents obtained most respondents regularly pregnant gymnastics criteria not ruptur as many as 27 respondents (81.8%) and a small part of the respondents irregular criteria with rupture degree 2 as much as 3 respondents (9.1%).

Results of research analysis of the relationship gymnastics pregnant with perineal rupture on primigravida at clinic of Kusuma Pertiwi Kecamatan Kepung Kediri Regency, that is from statistical test result using chi-square is got valuenilai value 0.000 <α 0.05 This indicates that Ho is rejected H1 accepted, meaning there is a relationship gymnastics pregnant with perineal rupture on primigravida at the clinic Kusuma Pertiwi Kecung Kepung District Kediri. The value of coeffecient correlation is 0.707 in the positive relationship category of positive relationship because it is in the range of correlation value 0,60-0,799.

Pregnant gymnastics consists of various movements of gymnastics, one of which is pregnancy exercise which, when done regularly, can elasticate the perineum. Muscle flexure or birth canal is necessary because pregnant women are usually worried and panicked when they want to give birth Pregnant gymnastics performed since the age of 28 weeks of pregnancy until the birth can prevent perineum rupture. In addition, perineal rupture can also be prevented with perineal massage, using the right hand manufer to control the birth of the baby, leads labor properly by the health worker, when the head pushes the vulva with a 5-6 cm diameter, guides the mother to slowly move and stop to rest or breathe quickly (Anggraeni, 2010).

Pregnancy gymnastics useful in the process of labor, one of which is to train and master the technique of breathing that plays a very important during pregnancy and labor. Usefulness of basic breathing exercises is to train calm, accelerate blood circulation and sufficient oxygen needs for mother and fetus. The benefits are equally important to strengthen and restore the elasticity of pelvic floor muscles, and inner thigh muscles, thus the process of contraction and relaxation associated with labor can reduce pain during labor. One exercise to strengthen and maintain elsisity is a strengthening exercises of pelvic floor muscles whose usefulness is to soften the pelvic floor muscles strong in a relaxed state, when straining muscles will relax actively so that the baby's head will come out easily, thus weak pelvic floor muscles will not easily tear when will give birth (Hulliana, 2008).

In the opinion of the researchers there is no significant relationship between gymnastics pregnant with perineal rupture on primigravida at the clinic Kusuma Pertiwi Kecung Kepung District Kediri. The value of coefficient correlation is categorized as strong relationship of positive relationship. It shows that pregnancy exercise really has an effect on the occurrence of perinium rupture which is described by the respondent most of the respondents regularly pregnant gymnastics criteria do not experience perenial rupture.

Regular respondents following pregnancy exercise did not experience perineal rupture due to pregnancy exercises performed regularly to help elasticity of pelvic floor muscles, mother's knowledge is also good because mother knows the technique of breathing, doing contraction and relaxation during the emergence of pain at the time of opening, and do technique push which is good at the time of delivery by pushing when the opening is complete and the contraction, so the mother did not push too early. Respondents who regularly follow pregnancy exercise will get effective results to minimize the incidence of perinium rupture.
V. CONCLUSION

1. Almost all respondents (84.8%) have regular pregnancy exercise criteria of 28 respondents.

2. Almost all respondents (81.8%) criteria did not rupture the perineum as much as 27 respondents.

3. Obtained value $\rho$ value $0.000 < \alpha 0.05$ This indicates that Ho is rejected H1 accepted, meaning there is arelationship gymnastics pregnant with perineal rupture on primigravida at the clinic Kusuma Pertiwi Kecung Kepung District Kediri. The value of coefficient correlation is 0, 707 in the positive relationship of positive relationship.

VI. BIBLIOGRAPHY


