# THE RELATIONSHIP BETWEEN KEGEL EXERCISES WITH PERINUEM WOUND HEALING IN POST PARTUM WOMEN

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#### **Abstract**

High risk/complication is a state of deviation from normal, which directly causes morbidity and death for both mother and baby. Research Objectives: to determine the relationship between Kegel exercises and perineal wound healing in post-partum mothers. The type of research used is descriptive analytic with a cross sectional approach. The population is post-partum mothers. The sampling technique used is total sampling. The sample in this study were 30 post-partum mothers. Some of the respondents who did not do Kegel exercises on post-partum mothers were 15 people (50%), did Kegel exercises on post-partum mothers by 15 people (50%), Most of the respondents experienced slow healing of perineal wounds as many as 16 people (53 .3%), there is a relationship between Kegel exercises and perineal wound healing in post-partum mothers (Chi-Square count obtained 8.051 and p value = 0.003).

Conclusion: It is recommended that health centers through nurse and midwife health workers be able to provide information and Kegel exercise training for every pregnant woman and postpartum mother in her working area.

**Keyword:** Kegel exercises, wound healing, post-partum mothers

#### Introduction

At the time of delivery, the mother may experience perineal lacerations. Perineal lacerations are tears in the birth canal or due to an episiotomy during delivery of the fetus. Perineal lacerations occur in almost all first deliveries and not infrequently also occur in subsequent deliveries. Health problems in mothers giving birth have an impact that can extend to various aspects of life and become one of the parameters of the nation's progress in health services (Zaenatur, 2019).

This perineal tear cannot be considered a mild problem, moreover spontaneous tears can result in serious complications including bleeding, severe pain, secondary infection, deformity of the birth canal. Given the many problems that arise as a result of tearing of the birth canal during childbirth, the handling of each incident of tearing of the birth canal must be done in a quality manner, in order to minimize the possibility of complications that can accompany the tear in the birth canal (Harini, 2019).

The puerperium (post-partum) is a period that begins after the birth of the placenta and ends when the uterine organs return to their pre-pregnancy state. Lasts approximately 6 weeks or 42 days, but generally recovers within 3 months. During pregnancy and childbirth, the mother experiences many physical changes, such as the abdominal wall becomes loose, the vagina and pelvic floor muscles loosen.

Postpartum exercise is very good for mothers after giving birth so that their health remains prime and to return to normal conditions. Exercises that are applied during the postpartum period are Kegel exercises. Kegel exercises are motion exercises that are performed as soon as possible after giving birth, so that the muscles that are stretched during pregnancy and childbirth can return to their normal state as before. The purpose of postpartum exercise is to restore / improve the reproductive organs, especially the abdominal muscles, to their original state. Improves stretching of the abdominal muscles, pelvic floor muscles, and movement muscles, promoting blood circulation (Tri, 2016).

Kegel exercises not only strengthen the pelvic muscles but also have several other benefits such as making stitches tighter, speeding up healing, relieving hemorrhoids, improving urine control. Midwives provide knowledge, understanding of Kegel exercises and examples of exercises starting from pregnant women and applied starting during pregnancy and until the postpartum period is complete. Kegel exercises are simple and easy to do, only taking a few minutes a day.

The purpose of this study was to analyze the relationship between Kegel exercises and perineal wound healing in post partum mothers.

#### Method

This type of research is descriptive analytic with cross sectional design. The population in this study was all 30 post-partum mothers. The sampling technique in this study is total sampling. The reason for taking total sampling is because the total population is less than 100, the entire population is used as a research sample. The types of data used are primary data and secondary data. Primary data is data obtained from filling out questionnaires by respondents and accompanied by researchers. Secondary data in this research was obtained from the birth report book.

Data analysis used univariate analysis to determine the frequency distribution of the relationship between Kegel exercises and perineal wound healing in postpartum mothers. Bivariate analysis is data analysis carried out using the Chi Square test, namely with a confidence level of 95% by looking at the p-value. If the p-value is less than 0.05, it means that the relationship is statistically significant and uses other alternative tests, namely the Fisher's Exact Test and the Kolmogorov-Smirnov Test.

#### **Results and Discussion**

- 1. Univariate Analysis
  - a. Kegel exercises mothers

Kegel exercises for post partum mothers	Amount	Percen tage (%)
Do not do	15	50 %
Do	15	50 %
Amount	30	100%

Source: SPSS data processing results

Based on the results it was found that 15 people (50%) did not do Kegel exercises for post-partum mothers, 15 people (50%) did Kegel exercises for post-partum mothers. As for the results of the cross-tabulation statistical test, the chi-square calculated value was 8.051 and the p-value was 0.003 <0.05, meaning that Ha was accepted and Ho was rejected, which meant that there was a relationship between Kegel exercises and perineal wound healing in post-partum mothers. Wounds are damage to the normal anatomical structure and function of the skin due to pathological processes that originate internally and externally and affect certain organs (Potter & Perry in Maryunani, 2014). Factors that affect wound healing are local factors, such as oxygenation, hematoma, and others. General factors, consisting of age, nutrition, sepsis, steroids, and drugs (Subiston in Maryunani, 2014). Other factors are lifestyle and mobilization (Kozier in Maryunani, 2014). The benefits of Kegel exercises are that they help in increasing circulation in the perineal area, helping the perineum heal from an episiotomy or tearing and reducing the chance of developing hemorrhoids (Fleten and Nystad, 2012). Kegel exercises performed by the mother have many benefits, especially in healing perineal wounds caused by an episiotomy performed in the perineal area. During a faster wound healing period, faster wound healing can reduce the possibility of infection that can occur due to injuries to the mother's body. From these benefits it can be concluded that Kegel exercises should be routinely performed by postpartum mothers (Eka Yulia F, et al. 2019).

Antini's research (2016) examined the effectiveness of Kegel exercises on the healing time of perineal wounds in normal post-partum mothers. The average perineal wound healing time in the mobilization group with an average number of days was 7 days, with a minimum limit of 4 days and a maximum of 9 days.

In the opinion of the research respondents who did not do Kegel exercises, only a small proportion had fast healing, namely out of 15 people as many as 3 (20%) people, based on the results obtained from the study it was assumed that Kegel exercises could accelerate wound healing. The behavior of Kegel exercises was not carried out because many mothers did not know the benefits of Kegel exercises. According to the researchers, this could be due to the average education of the respondents who were junior high school graduates, whose sources of information related to the benefits of Kegel exercises were very limited. In addition, many respondents with BMI were higher than normal, theory can affect the perineal wound healing process. Health workers can provide information related to wound healing so that respondents can avoid things that can disrupt the wound healing process.

In the opinion of the researchers, the results of the study showed that there were still respondents who had not carried out early mobilization. This is possible because the client feels afraid or feels pain when carrying out early mobilization, effective mobilization is carried out for postpartum women in accelerating the healing process of perineal wounds with Kegel exercises, including to improve blood circulation, renew body posture, improve a person's pelvic/pelvic floor muscles women so that the role of health workers is needed to disseminate good and correct information so that it has a positive effect in improving the health of clients with episiotomy wounds.

### b. Perineal wound healing in post-partum mother

Perineal wound healing	Amount	Percentage (%)
Get well	14	46,7 %
soon		
Slow down	16	53,3 %
Jumlah	30	100%

Based on the results table, it is known that perineal wound healing in post-partum mothers who healed quickly was 14 people (46.7%), and those who were slow healing perineal wounds in post-partum mothers were 16 people (53.3%).

As for the results of the cross-tabulation statistical test, the results obtained were a calculated chi square value of 8.051 and a p value of 0.003 <0.05 meaning that Ha was accepted and Ho was rejected, which meant that there was a relationship between Kegel exercises and perineal wound healing in post-partum mothers.

Wounds can be interpreted as disruption or damage to the integrity and function of tissues in the body. Wounds are damage to a network unit or component, where specifically there is a damaged or missing tissue substance. Wounds are damage to the continuity of the skin, mucous membranes and bones or other organs (Maryunani, 2014).

Postpartum mothers with perineal wounds actually do Kegel exercises which greatly affect the speed of healing of perineal wounds. Because from the data above there are some differences which state that doing Kegel exercises the process of healing wounds perineum wounds heal within 7 days while those who do not do Kegel exercises experience delays in wound healing.

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The process of healing perineal wounds in postpartum mothers who do Kegel exercises and those who do not do Kegel exercises is different. This is due to Kegel Exercises, namely muscle movements (pubococcygeal muscles) in Kegel exercises, in the form of contracting and stretching movements. The effects of these muscle movements include improving circulation of blood and oxygen to the muscles and surrounding tissues, such as the perineum. The benefits of smooth oxygen are that wounds in the perineum will heal quickly due to the effects of oxygenation (increasing the availability of oxygen and nutrients for wound healing) (Maryunani, 2015).

Antini's research (2016) examined the effectiveness of Kegel exercises on the healing time of perineal wounds in normal post partum mothers. The average length of time for perineal wound healing in the Kegel exercise group was 6 days with a minimum limit of 5 days and a maximum of 7 days. The results of Ridlayanti's research (2013) found that the average perineal wound healing days using Kegel exercises was more, namely 5-7 days. Meanwhile, according to Dewi Dina's research (2013) which examined the effectiveness of early mobilization on the speed of healing of perineal wounds, it was found that out of 16 respondents, most respondents (10) accelerated wound healing slower (> 7) and only 6 respondents were in the category of fast wound healing.

In the opinion of researchers, many factors influence wound healing, each respondent has his own factors so that the wound healing process is different for each respondent. In the Kegel exercise group, based on the research results it is known that Kegel exercises will be able to have a good effect on healing perineal wounds by carrying out the directions for carrying out Kegel exercises which can improve human physical abilities especially if carried out properly and with direction, because Kegel exercises can strengthen muscles the pelvic floor, especially the pubococcygeal muscles so that women can strengthen the urinary tract muscles and vaginal muscles so that it has an effect on accelerating the perineal wound healing process. In addition to Kegels, there are many movements that post. partum mothers can do, including gradually lifting the pelvis and others.

## 2. Bivariate Analysis

Based on the results, it was found that out of 16 post-partum mothers whose perineal wound healing was slow to heal, those who did Kegel exercises 4 (26.7%) and did not do Kegel exercises 12 (80.0%). Then 14 post-partum mothers whose perineal wound healed quickly, 11 did Kegel exercises (73.3%), and did not do 3 Kegel exercises (20.0%). Based on the cross-tabulation statistical test, the results obtained were a calculated chi square value of 8.051 and a p value of 0.003 <0.05 meaning that Ha was accepted, and Ho was rejected, which meant that there was a relationship between Kegel exercises and perineal wound healing in post-partum mothers. Muscle movements (pubococcygeal muscles) in Kegel exercises, in the form of contracting and stretching movements (Ward, 2009). The effects of these muscle movements include improving circulation of blood and oxygen to the muscles and surrounding tissues, such as the perineum. The benefits of smooth oxygen are that wounds in the perineum will heal quickly due to the effects of oxygenation (increasing the availability of oxygen and nutrients for wound healing) (Maryunani, 2015).

These results are also in line with research conducted by Oya and Sevgul (2015), the results revealed that the effect of Kegel exercises occurs within 2 weeks after the intervention to assist in increasing circulation in the perineal area, helping the perineum heal from episiotomy or tearing and reducing the chance of developing hemorrhoids. Also, a study agreed with (Fleten and Nystad, 2012), which reported that since pelvic floor muscle exercises performed from the day after delivery to two weeks later will increase the tone and elasticity of the perineum, improve circulation in this area so that episiotomy wound healing will be faster. In line with Antini's research (2016) the effectiveness

Kegel	Perineal wound		An	nount		
exercis	healing in post					
es	partum mothers				2.	pval
	Wound s are slow to heal	Wounds heal quickly	F	%	ount	ue ue
Do not	12	3 (20,0	1	100	8.0	.003
do	(80,0%	%)	5	%	51	
Do	4	11	1	100		
	(26,7% )	(73,3%)	5	%		
Amoun	16	14	3	100		
t			0	%		

of Kegel exercises on the healing time of perineal wounds in normal post-partum mothers. The average healing time for perineal wounds in the Kegel exercise group was 6 days with a minimum limit of 5 days and a maximum of 7

days, which was faster than in the mobilization group with an average number of days of 7 days, with a minimum limit of 4 days and a maximum of 9 days.

In the opinion of the researchers, from the research results it is known that the benefits of Kegel exercises performed by mothers have many benefits, especially in healing perineal wounds caused by episiotomy performed in the perineal area. During a faster wound healing period, faster wound healing can reduce the possibility of infection that can occur due to injuries to the mother's body.

#### Conclusion

From the results of research on the relationship between Kegel exercises and perineal wound healing in post-partum mothers, it can be concluded that there is a relationship between Kegel exercises and perineal wound healing in post-partum mothers (Chi-Square count obtained 8.051 and p value = 0.003).

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