

Differences in Perineal Wound Healing Between Doing Kegel Exercises and Not Doing Kegel Exercises

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Abstract

Perineal wounds are lacerations or injuries that occur along the birth canal (perineum) due to the delivery process. Wound healing is the process of replacing and repairing damaged tissue function. The purpose of this study was to see the difference in perineal wound healing between those who did Kegel exercises and those who did not do Kegel exercises. The research method uses a *Quasi-Experimental* with the *Posttest Only Control Group Design* approach. The number of samples taken were 18 postpartum women with perineal wounds at PMB Sri Puji UW S.Tr.Keb. The sampling technique used was *purposive sampling*. Data collection techniques using observation sheets. Statistical test using the *Mann Whitney*. The results of the study after being given the treatment obtained the value of *Asymp.Sig = 0.028*, thus the *Asymp.Sig* was smaller than $\alpha < 0.05$, thus it can be said that there was a difference in the group that did Kegel exercises and those who did not do Kegel exercises. Because there is a significant difference, it can be said that "there is an effect of doing Kegel exercises on the healing of perineal wounds in postpartum women" at PMB Sri Puji UW S.Tr.Keb Sampang. It is hoped that the results of the research can become information for the development of health sciences, especially health in postpartum women in healing perineal wounds and reducing delays in perineal wound healing. As well as management by doing Kegel exercises to speed up the healing process of perineal wounds.

Keywords: Perineum Wound Healing, Kegel Exercise

1. Introduction

Post-partum or postpartum is a condition where the reproductive organs recover like before pregnancy. During the puerperium, it is necessary to carry out care to assist the involution process, for example mobilization, diet, micturition, defecation, lactation, breast care and perineal care. (Basuki, Farida, 2012). Nearly 90% of deliveries experience perineal tears, either with or without an episiotomy. (Ridhyanti, 2013). Perineal wounds are perineal wounds due to tears in the birth canal either due to rupture or episiotomy during the delivery of the fetus (Walyani & Purwoastuti, 2015). Tearing of the birth canal is the second cause of postpartum hemorrhage. Injuries to the birth canal are usually minor but sometimes extensive and dangerous injuries occur. As a result of childbirth, wounds usually arise on the vulva around the vaginal introitus which are usually not deep but sometimes heavy bleeding can occur (Prawirohardjo, 2011).

Based on data from the Indonesian Ministry of Health (2015) the five biggest causes of maternal death are bleeding (30.3%), hypertension in pregnancy (27.1%), infection (7.1%), prolonged/obstructed labor (1.8%), and abortion (1.6%). In East Java, the incidence of puerperal infections reached 38 postpartum mothers or 8% of the 487 cases of maternal deaths (East Java Health Office, 2015).

The perineal wound will heal normally on the 5-7th day after delivery with the characteristics of the wound being closed, the tissues are fused, dry and there are no signs of infection (red, swollen, hot and painful). Based on a preliminary study conducted at PMB Sri Puji UW S.Tr.Keb Sampang, there were 10 postpartum mothers with perineal wounds. As many as 3 (13%) people recovered within 7 days and 7 (30.4%) people recovered within > 7 days.

Factors that influence the healing of perineal wounds in postpartum mothers are age, knowledge, parity, nutrition, culture and beliefs, early mobilization, types of injuries, facilities and infrastructure (Walyani & Purwoastuti, 2015). The impact

of a long-wound healing process is reduced wound strength, increased wound dehiscence, poor quality scars, and increased susceptibility to infection (Hasnidar, 2018).

The solution to speed up the healing process of perineal wounds in the community is that midwives explain the importance of perineal wound care, consuming nutritious and high-protein foods, early mobilization such as doing Kegel exercises. Kegel exercises are 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).

2. Method

This type of research is categorized as experimental research. Experimental research is a research activity to control, manipulate and observe research subjects. The experimental design used in this research is a simple experimental design (Posttest Only Control Group Design). With the Independent variable, namely Kegel Exercises and the Dependent variable, namely Perineum Wound Healing.

3. Findings and Discussion

Table 1. Frequency Distribution of Perineal Wound Healing in Postpartum Mothers Doing Kegel Exercises at PMB Sri Puji UW S.Tr.Keb Sampang.

No	Skor	Penyembuhan Luka
1	2	Normal
2	2	Normal
3	2	Normal
4	2	Normal
5	2	Normal
6	2	Normal
7	2	Normal
8	2	Normal
9	2	Normal
Total		Normal 7 hari : 9 (100%)

Based on table 1 above, the distribution of the frequency of postpartum women doing Kegel exercises was obtained from 9 respondents who all experienced normal wound healing, namely for 7 days.

Postpartum mothers who do Kegel exercises 100% recover normally within 7 days because Kegel exercises can improve the circulation of blood and oxygen to the muscles and tissues around the perineum so that the wounds in the perineum will heal quickly.

In postpartum mothers with perineal wounds who do Kegel exercises can speeding up the wound healing process because the effects of Kegel exercise movements can improve blood circulation and smooth oxygen, so that wounds in the perineum will heal quickly due to the effect of oxygenation (increasing the availability of oxygen and nutrients for wound healing) (Maryunani, 2015).

This is in accordance with the research of Ari Antini, Irna Trisnawati & Jundra Darwanti (2016). The results showed that the average day of wound healing for keegel exercises was faster than mobilization (pelvic lifting exercises). The average healing time for perineal wounds in the Keegel 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. The results of the bivariate analysis obtained a value of $P = 0.000$. So it can be concluded that there is a significant relationship between the length of wound healing time between mothers who do Keegel exercises and mothers who mobilize post-partum mothers.

Table 2. Frequency Distribution of Perineal Wound Healing in Postpartum Women Who Do Not Do Keegel Exercises at PMB Sri Puji UW S.Tr.Keb Sampang.

No	Skor	Penyembuhan Luka
1	2	Lambat
2	2	Lambat
3	3	Lambat
4	2	Lambat
5	2	Normal
6	2	Normal
7	3	Lambat
8	2	Lambat
9	2	Normal
Total		Lambat > 7 hari : 6 (66,7%) Normal 7 hari : 3 (33,3%)

Based on table 2. above, the distribution of the frequency of postpartum mothers who did not do Keegel exercises found that the majority of postpartum mothers experienced delays in wound healing, namely as many as 6 respondents (%).

One of the facts that affect wound healing in postpartum mothers is the educational factor. The results showed that most of the postpartum mothers had elementary-junior high school education. Postpartum mothers who have a low level of education find it increasingly difficult to accept the information they receive and find it difficult to find information about perineal wound care, causing slow wound healing (> 7 days).

The level of education has an exponential relationship with the level of health, the higher the level of education the easier it is to receive the information received. The concept of healthy living independently, creatively and sustainably. A mother's educational background greatly influences the level of mother's knowledge. (Notoatmodjo, 2013). Informally obtained from education, training or experience which is part of an effort to increase knowledge. Education has a positive relationship to knowledge in the development of attitudes and skills, while informally it is obtained from experience (Notoatmodjo, 2010).

Table 3. Frequency Distribution of Accelerated Perineal Wound Healing in Postpartum Women Who Do Keegel Exercises and Those Who Do Not Do Keegel Exercises

No.	Penyembuhan Luka Perineum		
	Perlakuan	No.	Kontrol
1	2	1	2
2	2	2	2
3	2	3	3
4	2	4	2

5	2	5	2
6	2	6	2
7	2	7	3
8	2	8	2
9	2	9	2
Mean : 2,00		Mean :2,44	
Man Whitney	<i>Asymp. Sig = 0,028</i>		

Based on the data in table 3, it shows that postpartum mothers who did Kegel exercises experienced normal wound healing or on the 7th day as many as 9 respondents (100%) had recovered, while postpartum mothers who did not do Kegel exercises mostly experienced delays in wound healing, namely as many as 6 respondents (66.7%) and 3 (33.3%) respondents experienced normal wound healing.

The results of data analysis using the Mann Whitney statistical test using the SPSS application so that the Asymp.Sig value = 0.028 is obtained, thus the Asymp.Sig is smaller than $\alpha < 0.05$, thus it can be concluded that H0 is accepted, thus it can be said that there are differences in the groups who did Kegel exercises and who did not do Kegel exercises. Because there is a significant difference, it can be said that "there is an effect of doing Kegel exercises on the healing of perineal wounds in postpartum women" at PMB Sri Puji UW S.Tr.Keb Sampang.

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.

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).

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).

According to research conducted by (Eka Yulia F, et al. 2019) it is known that the statistical test results obtained a p-value of 0.028 ($p\text{-value} < \alpha = 0.05$) meaning that there is an effect of Kegel exercises on wound healing in postpartum mothers, there is a difference in healing Wounds in post-partum mothers where mothers who do Kegel exercises heal faster when compared to mothers who do not do Kegel exercises with a difference of 1,133 points. This means that it can be concluded that Kegel exercises can accelerate the healing of perineal wounds. The results of the study concluded that there were differences in wound healing in post-partum mothers who did Kegel exercises and those who did not do Kegel exercises. Where in mothers who do Kegel exercises the healing process is better. This means that Kegel exercises can accelerate the healing of perineal wounds in post-partum mothers.

According to research conducted by (Antini, 2016) the average length of time for perineal wound healing in the Kegel exercise group is 6 days with a minimum limit of 5 days and a maximum of 7 days 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. The results of the bivariate analysis obtained a value of $P = 0.000$. So it can be concluded that there is a significant relationship between the length of wound healing time between mothers who do Kegel exercises and mothers who mobilize post-partum mothers.

4. Conclusion

Based on the results of the research and discussion through analysis between the dependent variable and the independent variable, the following conclusions can be formulated:

- 1 Postpartum women who do Kegel exercises generally experience normal perineal wound healing at PMB Sri Puji UW S.Tr.Keb
- 2 Postpartum mothers who do not do Kegel exercises experience slow healing of perineal wounds at PMB Sri Puji UW S.Tr.Keb
- 3 There is a difference in the speed of healing of perineal wounds in postpartum mothers between those who do Kegel exercises and those who do not do Kegel exercises at PMB Sri Puji UW S.Tr.Keb.

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