

## The Effect Of Kegel Exercise On The Healing Of Perineal Wounds In Post Partum Women At The Biadan Novi Lintas Timur Clinic, Panyabungan District, Mandailing Natal Regency

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### ABSTRACT

Childbirth often results in injuries to the perineum, either injuries resulting from vaginal tears or episiotomy, which causes pain in the scar from the birth canal tear. Kegel exercises can restore flexibility to the perineal muscles and Kegel exercises are easy to do and provide relaxation and reduce anxiety and thus the intensity of pain. The aim of this study was to determine the effect of Kegel exercises on perineal wound healing in post partum mothers. The design of this research is quantitative research using a pre-post test design research design approach. The population and sample for this study were 25 post partum mothers at the Novi Midwife Clinic. Data collection uses observation sheets. Data analysis used the Wilcoxon test. The research results showed that the average healing of perineal wounds in postpartum mothers before and after doing Kegel exercises experienced a significant increase, where before doing Kegel exercises the results of observations of perineal wound healing were in moderate and poor conditions, namely 9.48. Meanwhile, after carrying out Kegel exercises, the observation results for perineal wound healing were in good and moderate condition, namely with an average observation of 6.04. The existence of significant changes in perineal wound healing before and after Kegel exercise can be determined using the Wilcoxon test with a value of  $p=0.000$  ( $p<0.05$ ). These results prove that Kegel exercise has been proven to be effective in accelerating the healing of perineal wounds in postpartum mothers at the clinic. Novi Lintas Timur midwife, Panyabungan District, Mandailing Regency, Christmas 2022.

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## 1. INTRODUCTION

Perineum, namely the birth process, almost 90% of those who experience perineal tears either by tearing or by episiotomy, perineal wounds are defined as a tear in the birth canal or due to an episiotomy during delivery of the fetus (Santika, 2022). Proper care immediately after delivery or stitches can help reduce edema and bruising if the perineal area fails to heal, or is still causing pain even though initial healing should have occurred, re-stitching or repair may be recommended. Usually the healing of wounds from perineal tears varies, some heal normally (6-7 days) and some experience delays in healing (Urfah, 2021).

Kegel exercise is a form of exercise that is carried out by alternately contracting and relaxing the vaginal muscles, the anus perineal muscles with the aim of tightening the pelvic floor muscles (Ernawati & Ph, 2020). Through Kegel exercise movements, the muscles around the perineum are contracted and relaxed, making the sutures in the perineum tighter. Apart from Kegel exercise movements, it increases oxygen circulation and improves blood circulation to the perineum so that the intensity of perineal pain felt by post-partum mothers decreases. Another benefit of Kegel exercise is speeding up healing in post partum mothers, relieving hemorrhoids, improving urine control, controlling sphincter muscles (Khusniyati & Purwati, 2018).

The effect of Kegel exercises and prineum wound healing has been reported by researchers (Sulisnani, 2022). The title Kegel exercises on healing prineum wounds in post partum mothers

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reported the results that Kegel exercises can accelerate the healing of perineum wounds. It reported that the average wound healing in the experimental group before doing Kegel exercises was 10.73 and after doing Kegel exercises was 4.40. the average person recovers from a perineum wound. Kegel exercise is the therapy of choice in this research because it is based on research (Mustafidah & Cahyanti, 2020) which states that Kegel exercise is a non-pharmacological action so it can be applied by physiotherapy. Added by (iqmy & minhayati, 2020) that kegel exercises can restore flexibility to the perineal muscles and kegel exercises are easy to do and provide relaxation and reduce anxiety so that the intensity of pain due to perineal rupture felt by post partum mothers decreases.

According to WHO throughout the world, cases of infection due to perineum wounds in the birth canal or episiotomy (25-55%) estimate that throughout the world every year more than 585,000 mothers die due to complications of pregnancy and childbirth. The cause of high MMR is bleeding and the cause of bleeding is uterine atony. , perineal rupture and placental remains, there are 2.7 million perineal ruptures in mothers giving birth, it is estimated that it will reach 6.3 million in 2050 in Asia perineal rupture in the world (Singgalingging Muslimah 2019).

Based on UNICEF data in 2017, it was stated that the incidence of complications related to perineal rupture which caused the mortality rate in the world was recorded at 21.1 million cases, while in Southeast Asia alone the number was recorded at 16.3 million cases (UNICEF 2019). experiencing perineal rupture in Indonesia in the 25-30 year age group is 24%, while in mothers aged 32-39 years it is 62% (Widya L, 2022). Based on data from Indonesia's health profile in 2019, it is known that the incidence of complications including perineal rupture which was not handled properly in post partum mothers in Southeast Sulawesi province reached 13,765 cases (RI Ministry of Health 2019).

In Indonesia, in 2022, perineal rupture will be experienced by 75% of mothers who gave birth vaginally out of a total of 1951 spontaneous vaginal births, 57% of mothers received perineal stitches, 8% because of episiotomy and 29% because of spontaneous tearing (Ministry of Health of the Republic of Indonesia, 2022). Government program to minimize the occurrence of complications during pregnancy. postpartum as well as efforts to reduce maternal mortality with the government policy of making visits during the postpartum period a minimum of four visits so that there is interaction between postpartum mothers and health workers. The postpartum program aims to assess the health condition of the mother and baby, detect early any complications or problems that occur during the postpartum period and handle complications or problems that arise and disrupt the health of the postpartum mother and her baby (Marlianda, 2019). Postpartum mothers who experience perineal wounds need midwifery care.

Based on a survey by the Ministry of Health in North Sumatra, the highest cause of maternal death in 2013 was bleeding, many causes of post-partum bleeding, one of the causes was perineal tearing. The aim of the study was to determine the relationship between Kegel exercises and the incidence of perineal rupture at the Pratama Jannah Medan Tembung Clinic and the Tanjung Deli Tua Pratama Clinic in 2018. The results of the study showed that 13 third trimester primigravida pregnant women who did Kegel exercises experienced perineal rupture (27. %) while 13 primigravida pregnant women who did not do Kegel exercises (87%) in the chisquare test obtained a P value (0.0003) <a (0.05) so that HO was rejected, this shows that there is a significant relationship between Kegel exercises and perineal rupture occurs. And it is recommended that pregnant women do Kegel exercises regularly during pregnancy to prevent bleeding due to perineal rupture.

According to the Mandailing Natal Health Profile, the maternal mortality rate describes the number of women who died from a cause of death related to pregnancy disorders or their treatment (excluding accidents or incidents) during pregnancy, childbirth, and in the postpartum period (42 days after giving birth) without taking into account pregnancies. 100,000 births life, the success of maternal health can be seen from the indicator of maternal mortality (MMR). The performance achievement of the maternal mortality rate in 2021 is 61 per 100,000 live births, this means that the MMR achievement in 2021 has far exceeded the target set based on the strategic plan of the Natal Mandailing District Health Service, namely 72 per 100,000 live births.

In the results of the initial survey conducted by researchers in August 2022 at the Novi midwife clinic regarding the effect of Kegel exercises on healing perineal wounds because from the initial

survey the researchers obtained data on 10 post partum mothers with perineal wounds, who succeeded by applying the Kegel exercise technique to 8 people, and As many as 2 people were unsuccessful in using Kegel exercise movements because the birth canal was too wide, based on the description of the data above, therefore the author was interested in conducting research with the title of the relationship between Kegel exercise and the length of healing of perineal wounds in post partum mothers at the clinic. Midwife Novi Lintas Timur, Panyabungan sub-district, Mandailing regency, Christmas 2022.

## 2. METHOD

The design of this research is a quantitative type of research using a pre-experimental method, namely a design that includes only one group that is given a pre- and post-test with a one group pre-post test design research design approach (Arikunto 2010) regarding the effect of Kegel exercise on perineal wound healing. in post partum mothers.

This research was conducted at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency. This research was carried out in August 2022. The population is the number of post partum or postpartum mothers who want to be studied. In this study I took a population of 25 post partum or postpartum mothers. The sample is part of the population that will be used for research. The sample for this study consisted of 25 post partum mothers or postpartum mothers, where this research was carried out on patients of the Novi Cross East Midwife, Panyabungan District, Mandailing Natal Regency.

## 3. RESULTS

### Univariate Analysis

#### Frequency Distribution of Respondents by Age at the Novi Midwife Clinic in 2022

No	Age	F	%
1	< 20 Years	4	16.0
2	20 - 35 Years	14	56.0
3	>35 Years	7	28.0
Total		25	100

Based on the table above, it can be concluded that the majority of respondents aged between 20-35 years were 14 people (56.0%) and the minority of respondents aged < 20 years were 4 people (16.0%).

#### Frequency Distribution of Respondents based on Education at the Novi Midwife Clinic in 2022

No	Knowledge	F	%
1	elementary school	0	0.0
2	JUNIOR HIGH SCHOOL	9	36.0
3	SENIOR HIGH SCHOOL	11	44.0
4	College	5	20.0
Total		25	100

Based on the table above, it can be concluded that the majority of respondents had a high school education, namely 11 people (44.0%) and the minority of respondents had a tertiary education, namely 5 people (20.0%).

#### Frequency Distribution of Respondents by Occupation at the Novi Midwife Clinic in 2022

No	Age	F	%
1	IRT	13	52.0
2	Self-employed	9	36.0
3	Civil servants	3	12.0
Total		25	100

Based on the table above, it can be concluded that the majority of respondents worked as Housewives (IRT) as many as 13 people (52.0%) and the minority of respondents worked as civil servants as many as 3 people (12.0%).

### Pre-Test Attitude

#### Frequency Distribution of Pre-Test Attitudes of Female Students Regarding Realization in Nurul Hashanah Kutacane Private Health Vocational School

	NoResources	Frequency%
1 Mass media	12	48.0
2 Print media	5	20.0
3 Health workers	6	24.0
4 Family	2	8.0
Amount	25	100.0

Based on the table above, it can be concluded that the majority of respondents got their source of information from the mass media, namely 12 people (48.0%) and the minority of respondents got their source of information from their families, namely 2 people (8.0%).

#### Frequency Distribution of Perineal Wound Healing in Post Partum Mothers Before Kegrel Exercises at the Novi Midwife Clinic in 2022

NoHealing Perineal Wounds Before Kegrel Exercises	Frequency%
1 Good (<6 days)	3 12.0
2 Medium (7-12 days)	15 60.0
3 Bad (>12 days)	7 28.0
Amount	25 100.0

Based on the above you can conclude that of the 25 post partum mothers before doing Kegrel Exercise, 15 people (60%) experienced perineal wound healing in moderate condition, 3 people (12%) experienced perineal wound healing in good condition and 7 people (28%) experienced perineal wound healing in poor condition (>12 days).

#### Frequency Distribution of Perineal Wound Healing in Post Partum Mothers After Kegrel Exercises at the Novi Midwife Clinic in 2022

NoHealing Perineal Wounds Before Kegrel Exercises	Frequency%
1 Good (<6 days)	16 64.0
2 Medium (7-12 days)	9 36.0
3 Bad (>12 days)	0 0.0
Amount	25 100.0

Based on the above you can conclude that of the 25 post partum mothers after Kegrel exercises, 16 people (64%) experienced better perineal wound healing, and 9 people (36%) experienced moderate perineal wound healing (7-12 days).

### Bivariate Analysis

#### The Effect of Kegrel Exercises on Healing Perineal Wounds in Postpartum Mothers at the Novi Midwife Clinic in 2022

Perineal Wound Healing Data	N	Average	Z	p-value
Pretest	25	9.48		-4,0660,000
Posttest	25	6.04		

In the table above the average healing rate of perineal wounds in postpartum mothers before and after doing Kegrel exercises experienced a significant increase, where before doing Kegrel exercises the observation results for perineal wound healing were in moderate and poor conditions, namely 9.48. Meanwhile, after carrying out Kegrel exercises, the observation results for perineal wound healing were in good and moderate condition, namely with an average observation of 6.04.

The existence of significant changes in perineal wound healing before and after Kegrel exercises can be determined using the Wilcoxon test at a significance level of 95% ( $\alpha = 0.05$ ). The results of the analysis obtained a value of  $p=0.000$  ( $p<0.05$ ). Therefore, the hypothesis is accepted, this means that there is an effect of Kegrel exercise on the healing of perineal wounds in post partum mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency in 2022. These results prove that Kegrel exercise is proven to be effective in accelerating the healing of perineal wounds



in post partum mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Regency, Christmas 2022.

### **Discussion**

#### **Healing Perineal Wounds in Post Partum Mothers Before Kegel Exercises at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency**

Based on the research results, it shows that of the 25 post partum mothers before doing Kegel Exercises, 15 people (60%) experienced perineal wound healing in moderate condition, 3 people (12%) experienced perineal wound healing in good condition and 7 people (28%) experienced perineal wound healing in poor conditions (>12 days).

Perineal wounds are splits (breaks, injuries, abrasions) on the skin due to exposure to sharp objects, friction, pressure in the perineal area (Anggraeni, 2012). Improper care of perineal wounds can cause infection. The condition of the perineum being exposed to locea and moist will really support the growth of bacteria which can cause infections in the perineum.

If we look at the characteristics of the respondents, most of the mothers work as housewives, with a high school education. Status gravidarum is the birth of her first child. Many respondents complained of postpartum wound pain, breast milk not coming out and weakness. Before the mother did Kegel exercises, the pain she felt was indicated on the moderate pain scale. The mother experienced a grade 1 laceration, the perineal wound looked wet, reddish, the tissue had not fused and there was no edema on the vulva. Researchers provide information on how to prevent infection by providing information about the benefits of Kegel Exercise to help speed up the healing of perineal wounds, telling mothers to increase nutritional and fluid intake, warning signs during the postpartum period. (Daily, 2021)

Postpartum mothers should eat lots of foods that contain protein, lots of fluids, vegetables and fruit and there should be no restrictions on fluid intake. Fruits contain various vitamins and minerals, which play a role in facilitating the functioning of the body's organs, especially accelerating uterine involution. In the wound healing process, bromelain enzymes play a role in the inflammatory phase. The potential of bromelain as an anti-pain, anti-edema, debridement (removing skin debris) caused by burns, accelerating wound healing, and increasing the absorption of antibiotics, is very useful in wound healing (Mochter, 2018).

According to researchers, perineal wound healing before doing Kegel exercises is still considered unhealthy and moderate. Kegel exercises are not carried out because many mothers do not know the benefits of Kegel exercises, so 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.

#### **Healing of Perineal Wounds in Post Partum Mothers After Kegel Exercises at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency**

Based on the research results, it showed that of 25 post partum mothers after Kegel exercises, 16 people (64%) experienced better perineal wound healing, and 9 people (36%) experienced moderate perineal wound healing (7-12 days). Post partum mothers with perineal wounds find that doing Kegel exercises has a great influence on the speed of healing of perineal wounds. Because from the data above there are several differences which state that doing Kegel exercises in the healing process of perineal wounds heals within 7 days, while those who do not do Kegel exercises experience delays in wound healing.

The benefits of Kegel exercises are that they help increase circulation in the perineal area, help the perineum heal from an episiotomy or tear and reduce the chance of developing hemorrhoids. During faster wound healing, faster wound healing can reduce the possibility of infection that can occur due to wounds on the mother's body. From these benefits it can be concluded that Kegel exercises should be a routine action carried out by mothers after giving birth (Eka Yulia F, et al. 2019).

Antini's research (2016) shows the effectiveness 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 of 5 days and a maximum of 7 days. Ridlayanti's (2013) research results showed that the average number of days for healing perineal wounds using Kegel exercises was 5-7 days.

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Based on research results, it is known that Kegel exercises will be able to have a good influence on the healing of perineal wounds. By carrying out instructions for implementing Kegel exercises, it can improve human physical abilities, especially if carried out appropriately and in a targeted manner, because Kegel exercises can strengthen the pelvic floor muscles so that women can strengthen the muscles of the urinary tract and vaginal muscles so that it has an effect on accelerating the healing process of perineal wounds. (Potter & Perry in Maryunani, 2014).

According to researchers' assumptions, there are differences in wound healing in post-partum mothers before and after doing Kegel exercises. Where post partum mothers who have done Kegel exercises have a better healing process. This means that Kegel exercises can speed up the healing of perineal wounds in post-partum mothers.

#### **The Effect of Kegel Exercises on Healing Perineal Wounds in Postpartum Mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency**

Based on the research results, the average healing rate of perineal wounds in postpartum women before and after doing Kegel exercises experienced a significant increase, where before doing Kegel exercises the observation results for perineal wound healing were in moderate and poor conditions, namely 9.48. Meanwhile, after carrying out Kegel exercises, the observation results for perineal wound healing were in good and moderate condition, namely with an average observation of 6.04. The existence of significant changes in perineal wound healing before and after Kegel exercises can be determined using the Wilcoxon test at a significance level of 95% ( $\alpha = 0.05$ ). The results of the analysis obtained a value of  $p=0.000$  ( $p<0.05$ ). Therefore, the hypothesis is accepted, this means that there is an effect of Kegel exercise on the healing of perineal wounds in post partum mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency in 2022. These results prove that Kegel exercise is proven to be effective in accelerating the healing of perineal wounds in post partum mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Regency, Christmas 2022.

The results of this study are in line with research by Hariani (2021) that there is a relationship between Kegel exercises and perineal wound healing in post partum mothers. There is a difference in wound healing where mothers who do Kegel exercises heal faster when compared to mothers who do not do Kegel exercises, with  $p$ -value 0.028 ( $p$ -value  $< 0.05$ ). From the results of the research conducted, it is necessary to carry out regular Kegel exercises starting from pregnancy which aims to strengthen the pelvic floor muscles before delivery and can flex the perineal tissue as the baby's birth canal, thereby reducing the possibility of tearing the birth canal or episiotomy in the perineum.

In the researcher's opinion, from the research results it is known that the benefits of Kegel exercises carried out by mothers have many benefits, especially in healing perineal wounds caused by episiotomy carried out in the perineal area. During faster wound healing, faster wound healing can reduce the possibility of infection that can occur due to wounds on the mother's body. From these benefits it can be concluded that Kegel exercises should be a routine action carried out by mothers after giving birth. So the role of midwives is really needed in improving this activity. Midwives can teach Kegel exercises when the mother is having a pregnancy check-up, so that the mother understands that the Kegel exercises that will be done during the postpartum period are very beneficial for her, especially in reducing pain and healing wounds.

#### **4. CONCLUSION**

There was an effect of Kegel exercises on perineum wounds on post partum mothers before doing Kegels, there were 25 respondents before doing Kegels, 28% had bad wounds, after doing Kegel exercises no one else had bad wounds. Before doing Kegel exercises there were 60% who experienced moderate injuries, and after doing Kegel exercises there was a decrease of 36%. And after doing Kegel exercises there was an increase of 12% of mothers experiencing perineum wounds in good condition, and after doing Kegel exercises there was an increase of 64% of post partum mothers experiencing perineum wounds in post partum mothers. Novi Lintas Timur Midwife Clinic It is best to provide education and practice to postpartum mothers about the effectiveness of Kegel exercises for healing perineal wounds so that postpartum mothers can understand the benefits and disadvantages of not

treating perineal wounds. Other researchers should be able to conduct direct research on Kegel exercise interventions for healing perineal wounds so that they can carry out direct observations of the research object, or also of future researchers.

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