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DESCRIPTION OF POSTPARTUM EXERCISE FOR UTERINE INVOLUION IN Mrs. A WITH SPONTANEOUS POSTPARTUM IN SELAKAMBANG

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Abstract

Background: Uterine involution is the process by which the uterus returns to its pre-pregnancy condition and weighs around 60 grams. This process begins immediately after the placenta is delivered due to contraction of the smooth muscles of the uterus, measurement of uterine involution and also by expulsion of the lochea. One way to treat uterine involution is through postpartum exercise to accelerate the decrease in the height of the uterine fundus. Objective: To determine the description of postpartum exercise on the speed of uterine involution in postpartum mothers. Method: This research is a type of qualitative research designed as a case study method. Results: After doing postpartum exercise for 7 days with a duration of 10- 15 minutes, the height of the uterine fundus can be reduced by 9 cm from 12 cm on the first day to 3 cm on the 7th day. Conclusion: postpartum exercise can influence the uterine involution process in postpartum mothers, and the speed of uterine involution in postpartum mothers who do exercise is fast

Keywords : postpartum exercise, postpartum involution, uterine mothers.

1. INTRODUCTION

Childbirth is the process of expulsion of a fetus and placenta as a result of conception that is of sufficient age or older and has the ability to live outside the womb. The birthing process can be carried out in two ways, namely through the birth canal (vaginal) and another way (surgery). Labor begins when the uterus experiences contractions which cause discomfort in the cervix (Ramadilla et al., 2022).

World Health Organization (WHO) stated that around 500 mothers die every year due to problems related to pregnancy and the birthing process. This death occurs around 99% in developing countries including Indonesia. Most of the Maternal Mortality Rate (MMR) is caused by bleeding, eclampsia and postpartum infections. Bleeding often occurs due to slow uterine involution which is the dominant factor causing death (Immawanti,

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2019). Indonesia has the highest rate of AKI caused by bleeding due to late uterine involution, where AKI is 470 per 100,000 live births. (Samsinar, 2019).

The postpartum period or puerpenium is the period that begins with the birth of the placenta and ends when the reproductive organs return to their previous state. The postpartum period usually lasts approximately 6 weeks, but total recovery of the genital organs generally takes around 3 months. (Zebua et al., 2024).

During the postpartum period, the process of healing the reproductive organs is something that needs to be done. One of them is monitoring the height of the uterine fundus (TFU) and the degree of uterine contractions during the postpartum period to ensure recovery of the reproductive organs. This process is based on significant physiological changes during pregnancy. The uterus, which experiences contractions, will gradually decrease in size so that eventually it is no longer palpable above the symphysis pubis. (Silfi et al., 2021). On the first day after giving birth, it is normal for the uterus or TFU to reach the navel. TFU will fall about 1 cm below the navel on the second day, and on the third day it will fall to 2 cm below the navel. Through postpartum exercise, the height of the uterine fundus can decrease by 1-2 cm below the navel every day. By the ninth day, the uterus is usually no longer palpable (Naziro et al., 2021).

Doing postpartum exercises can increase oxygen for muscle needs, such as those needed by the uterine muscles. This postpartum exercise can help stimulate uterine contractions, so that you get better contractions. This exercise can also help expel lochia which supports the uterine involution process. Rianti's abdominal exercise or postpartum exercise for Abdominis Muscles is a modification of relaxation techniques and abdominal muscle exercises guided by a caregiver. Postpartum exercise lasts 15-30 minutes and consists of 3 main stages, namely initial relaxation, core exercises and final relaxation. Each stage has special gymnastic movements. This exercise is recommended to be done every day from the first day to the seventh day after giving birth. (Silfi et al., 2021).

Research conducted by Nurniati Tianastia Rullyni et al in 2014 suggested that postpartum exercise had a significant effect in reducing the height of the uterine fundus in mothers after giving birth. The group that did postpartum exercise experienced a faster decline compared to the group that didn't do the exercise, and this difference was statistically significant.

Based on the data described previously, researchers will conduct a case study with the title "Description of postpartum exercise on uterine involution in Mrs. A with spontaneous postpartum in the village of Selakambang Kaligondang Purbalingga".

2. RESEARCH METHODS

This type of research is qualitative research designed as a case study method. This study aims to analyze more deeply how postpartum exercise can affect uterine involution in Mrs. A. P. The author took one respondent, namely Mrs. A, 21 years old, managed for three meetings. These respondents met the inclusion criteria, namely spontaneous

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postpartum mothers from day 1 to day 7. In this case study, respondents were given postpartum exercise for seven days by observing the height of the uterine fundus in three meetings held 24 hours after delivery, after 3 days, and on the 7th day of the postpartum period. The tools needed in this research are a mat/mat for exercise and a pillow. The time required to do postpartum exercises is around 5-10 minutes. There are three main steps in postpartum exercise, namely initial relaxation, core relaxation and final relaxation. This exercise is done every day from the first day to the 7th day after delivery.

3. RESULTS AND DISCUSSION

The author took one respondent, namely Mrs. A, 21 years old, managed for three meetings. These respondents met the inclusion criteria, namely spontaneous postpartum mothers from day 1 to day 7. In this case study, respondents were given postpartum exercise for seven days by observing the height of the uterine fundus in three meetings held 24 hours after delivery, after 3 days, and on the 7th day of the postpartum period. In providing postpartum exercises for 7 days, the results of measuring Uterine Fundal Height (TFU) during 3 meetings will be obtained which will be presented in the form of a table and narrative as follows.

Table of uterine fundal heidht during the postpartum period

No.	Day	Height of uterine fundus
1.	Firsy	12 cm
2.	Second	7 cm
3.	Seventh	3 cm

After postpartum exercise, the results of the uterine fundal height (TFU) measurement were 12 cm on the first day postpartum. Then, after postpartum exercise intervention, on the 3rd day the height of the uterine fundus became 7 cm, and on the 7th day postpartum it was 2 cm. Based on the results of this research, it can be seen that there was a significant decrease in the height of the uterine fundus on the 3rd and 7th days. Where the decrease was 9 cm from the original TFU measurement of 12 cm on the first postpartum day to 2 cm on the seventh day.

Based on research regarding the description of postpartum exercises to accelerate uterine involution in Mrs. A, it was found that the height of the uterine fundus reached 12 cm in the center before postpartum exercises were carried out on the first day after giving birth. According to Bahiyatun (2019), on the first day of the postpartum period, the height of the uterine fundus ranges from 12-13 cm above the symphysis or about 1 cm below the center of the stomach. In this case, the TFU changes experienced by Mrs. A is still classified as normal, however, according to Walyani and Purwoastuti, (2017) stated that a decrease in Uterine Fundal Height (TFU) can occur quickly by doing postpartum exercises, so the authors continue to carry out research on postpartum exercise. The research was

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carried out for 7 days, during which uterine fundal height was measured at 3 meetings, namely on the first day, third day and seventh day postpartum. Even though there were only 3 meetings, Mrs. A continues to do postpartum exercises every day as proven by documentation and is accompanied by her family so that Mrs. A was proven to have carried out postpartum exercises even without supervision from the author. After carrying out postpartum exercise, the results of measuring the height of the uterine fundus after postpartum exercise intervention on the 3rd day postpartum, the height of the uterine fundus was 7 cm, and on the 7th day postpartum, the height of the uterine fundus was 2 cm. The following is data on measuring the height of the uterine fundus before and after postpartum exercises which will be presented in table form below.

TFU measurement table before and after postpartum exercise

No.	Day	Height of uterine fundus	
		Before exercise	After exercise
1.	First	12 cm	12 cm
2.	Third	8 cm	7 cm
3.	Seventh	4 cm	3 cm

Based on the research results, it appears that there was a significant decrease in uterine fundal height on the 3rd and 7th days postpartum. Theoretically, the uterus contracts and retracts after the baby is born to close the placental implantation scar on the uterine wall. After 24 hours postpartum, the height of the uterine fundus is about one finger below the navel (1 cm). On the third day, the height of the uterine fundus decreases to 3 cm below the navel, with a decrease of 1 cm every day. This process takes place gradually and in the end the uterus returns to its pre-pregnancy size (Walyani dan Purwoastuti, 2015). Involution is the process in which the uterus returns to its pre-pregnancy state with a weight of approximately 60 grams. The involution process begins after birth of the placenta due to contraction of the smooth muscles of the uterus. Involution occurs due to gradual contraction and retraction of the uterine muscle fibers. If the uterus fails to return to its pre-pregnancy state, the condition is called subinvolution. Signs of subinvolution are the discharge of fresh red lochea, slow descent of the uterine fundus, soft uterine tone, and lack of feeling of contractions in the postpartum mother which can result in bleeding. Uterine involution will occur naturally over time, but this process can be accelerated by doing postpartum exercises. The uterus gradually shrinks (involution) so that it eventually returns to its pre-pregnancy state (Huliana, 2020).

Postpartum exercise is a physical exercise that aims to restore health, speed up the healing process, prevent complications, as well as restore and improve the condition of the back muscles, pelvic floor, 38 Yakpermas Banyumas Polytechnic and stomach that stretch

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after pregnancy. Postpartum exercise has one of the main benefits, namely accelerating the process of uterine involution by encouraging early ambulation in postpartum mothers. Failure to do the involution process can potentially cause complications such as serious bleeding (Huliana, 2018).

Postpartum exercises are performed to stimulate uterine contractions which can quickly reduce the height of the uterine fundus. The rate of decrease in the height of the uterine fundus is closely related to the provision of postpartum exercises to the mother after giving birth. There was a more significant decrease in Uterine Fundal Height (TFU) in mothers who did postpartum exercise compared to those who did not do exercise. In postpartum mothers who do not exercise, the decrease in the height of the uterine fundus is usually slower and can cause prolonged bleeding. This is proven by research conducted by Rahayu, (2020) that the reduction in uterine involution will occur more quickly for those who do exercise compared to those who do not do exercise.

According to research by Surti and Nawati (2020), postpartum mothers who did postpartum exercise had a significant positive impact on physical recovery, with results that were nine times better than the group who did not do exercise. Carrying out postpartum exercises after giving birth can influence rapid physical recovery, including reducing the height of the uterine fundus during uterine involution.

According to Samsinar (2019), the negative effects that occur if postpartum exercise is not carried out include varicose veins, venous thrombosis due to blood clotting which is not smooth due to limited movement during postpartum, infection due to suboptimal uterine involution so that the body cannot expel remaining blood properly. Good.

Based on the results of the research and theory above, postpartum exercise has an effect on reducing the height of the uterine fundus because this exercise can stimulate muscle contractions. The successful implementation of postpartum exercise is also influenced by the mother's good health, high awareness and motivation from patients to do the exercise, and the active role of medical staff in providing education regarding the importance of postnatal exercise in postnatal recovery.

4. CONCLUSION

In this study, postpartum exercise was carried out for 7 days with a duration of 10-15 minutes, carried out in the morning or evening. After intervening with Mrs. A postpartum with uterine involution on June 17-23 by doing postpartum exercises, it was concluded that postpartum exercises could speed up the process of uterine involution in Mrs. A so that the uterus gradually returns to its original size. Postpartum exercise affects the uterine involution process in postpartum mothers and can accelerate changes in uterine involution in mothers who do postpartum exercise.

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5. REFERENCES

Naziro, K., Munir, Z., & Kholid, A. (2021). Efektifitas Puerperal Gymnastic dan Kegel Exercise terhadap Involusi Uterus pada Ibu Postpartum Hari 1 - 3. Jurnal Kebidanan Harapan Ibu Pekalongan, 039, 92–99.

Ramadilla, D. G., Herawati, H., Diniyati, D., & Utama, S. Y. (2022). Pengaruh Senam Kegel terhadap Inkontinensia Urin pada Ibu Post Partum di PMB Nuri Kota Jambi. Jurnal Akademika Baiturrahim Jambi, 11(2), 315. https://doi.org/10.36565/jab.v11i2.576

Samsinar, S. (2019). Pengaruh Senam Nifas Terhadap Involusio Uteri Di Rumah Sakit Umum Daerah Andib Makkasau Kota Parepare. Jurnal Fenomena Kesehatan, 02(01), 237–242. https://ojs.ikbkjp.ac.id/JFK/article/view/88

Silfi, S., Sriwenda, D., Widiawati, I., & Purwaningsih, D. (2021). Efektivitas Senam Nifas Terhadap Involusi Rahim. Jurnal Kesehatan Siliwangi, 2(2), 399–404. https://doi.org/10.34011/jks.v2i2.738

Zebua, B., Zebua, B., Sembiring, A., Pintu Air Pasar, J. I., & Bekala Kec Medan Johor, K. (2024). Pengaruh Senam Nifas Terhadap Involusi Uteri Pada Pasca Persalinan Normal di Puskesmas Semambawa Nias Selatan Tahun 2023 Lisbet Gurning STIKes Mitra Husada Medan. Jurnal Ilmiah Ilmu Kesehatan Dan Kedokteran,

2(2), 104–111. https://doi.org/10.55606/termometer.v2i2.3650