


The effectiveness of postpartum exercise on uterine involution in postpartum women in Aek Haruaya village, Portibi district, North Padang lawas reGENCY in 2023

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Article Info	ABSTRACT
<p>Keywords: Postpartum Exercise, Uterine, Involution</p>	<p>The postpartum period (pueperium) is the period after childbirth is complete, up to 6 weeks or 42 days. After the postpartum period, the reproductive organs will slowly experience changes like before pregnancy. Postpartum mothers experience recovery in their physical and psychological condition. What is expected in the 6 week period after giving birth is that all of the mother's body systems will recover from the various effects of pregnancy and return to their pre-pregnancy state, one of which is changes in the uterus which gradually recovers to its pre -pregnancy state. Postpartum mothers will experience changes in uterine involution, namely the process of returning the uterus to the state it was in before pregnancy. The uterus will decrease in size in approximately 6 weeks. However, it can be faster if you balance it by doing postpartum exercises. This study aims to determine the effectiveness of postpartum exercise on uterine involution in postpartum mothers. This research is a quasi-experimental-research to test cause and effect relationships or find the effect of an intervention on the population, using the Wilcoxon signed rank test to see the effect before and after postpartum exercise on the respondent's uterine involution. This research was conducted in Aek Haruaya village, Portibi District, North Padang Lawas Regency in 2023. The results of this research show a p-value of 0.000 ($\alpha < 0.05$), which means that there is an influence of postpartum exercise on uterine involution in mothers in Aek Haruaya Village, Portibi District, North Padang Lawas Regency in 2023.</p>
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INTRODUCTION

The postpartum period (pueperium) is the period after childbirth is complete up to 6 weeks or 42 days. After the postpartum period, the reproductive organs slowly will experience change like before pregnant. Mother postpartum experience recovery return condition physique And psychological Which expected in the 6 week period after delivery are all systems The mother's body will recover from the various effects of pregnancy and return to normal circumstances before pregnant Wrong the only one is change uterus

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Which gradually recovers to its pre-pregnancy state (Sukarni & Sudarti, 2014).

Saefuddin (2010), estimates that 60% of maternal deaths due to pregnancy occur after delivery and 50% Maternal death during the postpartum period occurs in the first 24 hours big caused Because bleeding post partum. Wrong One reason bleeding post partum is a failure of involution uterus.

During the postpartum period, a process occurs which is very important for the mother to return her condition to the same as Before pregnancy, this process is uterine involution. If the uterine involution process No walk with Good so will arise complications Which called subinvolution uterus. Reason sub involution uterus Which most often is retained placental fragments which will cause infection and bleeding advanced (late postpartum haemorrhage). To speed up the involution process Wrong One exercise yeah recommended is exercise postpartum (Maritalia, 2014).

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Exercise postpartum is something exercise which can done 24 O'clock after giving birth with movements that have been adapted to the mother's condition after give birth to. Urgency exercise postpartum in a way the mechanism can accelerate healing, prevent complications, recover and strengthens the back muscles, pelvic floor muscles and abdominal muscles and reducing the risk of sub involution (Remelda, 2012).

Results study Munayaroh (2015), by doing observations are known that Mother Which do exercise postpartum its decline more fast from in mothers who do not do postpartum exercise, based on this it is expected in post partum mothers to carry out postpartum exercises both in the hospital and At home so that its decline more as well as prevent bleeding occurs. It is the description of the problem that attracts the attention of researchers conducted a study entitled "Effectiveness exercise postpartum to involution uterus on postpartum mothers in Aek Haruaya village, Portibi District, North Padang Lawas Regency in 2023.

Peurperium or the postpartum period is defined as the post partum period or time since baby born And placenta come out 6 Sunday, Next, there are organs related to the womb experiencing changes such as bleeding and other related times give birth to (Asih & Riseni, 2015) Involution or shrinkage uterus is something process Where uterus return to condition before pregnant with heavy around 30 grams. Process This begins immediately after the placenta is delivered due to contraction of smooth muscles uterus (Mulati, E

2015).

Involution happen Because individual cells become smaller due to excess cytoplasm thrown away. Involution is caused by the autolysis process, where protein substances wall womb broken, absorbed And Then thrown away as water pee.

According to Wallyani (2015) the aim of postpartum exercise is to facilitate happen process involution uterus (return womb to form beginning). Do exercise postpartum will affects muscle requirements oxygen Which where need will increase, means need Genre strong blood like uterine muscle when done exercise postpartum will stimulate the contractions, so that contraction uterus will the more Good, expenditure lochia will fluent thereby influencing the involution processwomb . The duration of each postpartum exercise is between 5-10 minutes. There are 3 step main in do exercise postpartum that is step relaxation initial, core and final relaxation. Meanwhile, each step consists of: some gymnastic movements. Gymnastics is done every day starting from the day first postpartum until the 10th day or until before the 10th day postpartum If There is inspection by the nurse when fundus not palpable. On the first day, postpartum exercises are carried out 3 times, namely in the first 2 hours, 6 hours and 24 hours postpartum. Gymnastics on the day First, it starts with initial relaxation which aims to soothe the mother get used to breathing well and can repeat it correctly on day furthermore, so that all over vessels blood will filled by oxygen optimally which will influence uterine contractions by Good And will speed up recovery.

METHOD

This research is a quasi-experimental-research to test causal relationships or find the effect of an intervention on a population without randomization in determining research subjects. The research design used was a one group pre-post-test design This was done by providing treatment to the intervention group before and after postpartum exercise. (Bhishma Murthi, 2016)

Researchers collected data using instrument measurement of the mother's uterine fundal height (TFU) and secondary data in the form of the respondent's medical records. Data analysis used in this study was the Wilcoxon signed rank test to see the effect before and after postpartum exercise on involution uterus on postpartum mother . As for reasons Using this test is to have an ordinal measuring scale and to see the treatment given to intervention groups in pairs, namely pre-post test design

RESULTS AND DISCUSSION

In this research, what acts as the dependent variable is involution uterus on postpartum mothers , while the independent variable is postpartum exercise. The research instrument was an observation sheet for involution events uterus on postpartum mothers before and after carrying out postpartum exercises in Aek Haruaya village, Portibi District, North Padang Lawas Regency in 2023, the following results were obtained:

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Frequency Distribution of Uterine Involution in Postpartum Mothers Before and After Carrying Out Postpartum Exercises

Table 1. Average Incidence of Uterine Involution in Postpartum Mothers Before And After carrying out postpartum exercises

No.	Involution Uteri	Meanelementary school	S.E	Min-Max
1.	Involution Uterus Before Carrying Out Postpartum Exercises	4.90	0.854	0.168 3- 6
2.	Involution Uterus After Carrying Out Postpartum Exercises	7.37	0.765	0.146 3- 8

Based on the table above it is known that the average incidence of uterine involution before carrying out postpartum exercises for 30 postpartum mothers, with a mean of 4.90, standard deviation, 0.854, standard error of 0.168 and min-max value of 3-6. Meanwhile, the incidence of uterine involution after carrying out postpartum exercises on 30 postpartum mothers, obtained a mean value of 7.37 with a standard deviation of 0.765, a standard error of 0.146 and a min-max value of 4-8.

Table 2. Influence Postpartum Exercise With Uterine Involution in Postpartum Mothers (N=30)

No	Variable	Mean	elementary school	T- Test	P- Value
1.	Pretest	5.06	0.873	- 7,100	0,000
2.	Posttest	7.22	1,166		

Based on the table, it can be seen that the difference in the results of measuring the incidence of uterine involution in postpartum mothers before carrying out postpartum exercises for 30 respondents, obtained a mean value of 5.06 with a standard deviation value of 0.873. Meanwhile, the results of measuring the incidence of uterine involution in postpartum mothers after carrying out postpartum exercises for 30 respondents obtained a mean value of 7.22 and a standard deviation of 1.166. The results of statistical tests using dependent tests obtained a p-value of 0.000 ($\alpha < 0.05$), which means that there is an influence of postpartum exercise on the incidence of uterine involution in post partum mothers.

The influence of postpartum exercise on the incidence of uterine involution in postpartum mothers

Based on table 2 seen that Differences in the results of measuring the average incidence of uterine involution in postpartum mothers before Carrying out postpartum exercises on 30 respondents obtained a mean value of 5.06 and a standard deviation of 0.873. Meanwhile, the average incidence of uterine involution in postpartum mothers after carrying out pregnancy exercises, obtained a mean value of 7.22 and a standard deviation

of 1.166. Statistical test results using test-dependent obtained mark p- value 0.000 ($\alpha < 0.05$) which means that there is an influence of postpartum exercise on the incidence of uterine involution in postpartum mothers.

Study This mention involution uterus gradually shrinking after labor. However involution uterus will more fast shrinking If done exercise postpartum. According to Anggraini (2012), uterus in a way gradually become small (Involution) so that Finally return like before pregnancy. Involution is change Which is process return of the uterine organ or uterus And road born after baby born until reach circumstances like before pregnant. Involution or shrinkage uterus is something process Where uterus return to condition before pregnant with weight around 60 grams.

Involution uterus will taking place in a way normal with change day, but will more fast recover If balanced with do exercise postpartum. Process journey involution uterus in a way normal that is in 12 O'clock, the uterine fundus will approach 10 cm or parallel with umbilicus. Furthermore involution will fast happen with decline fundus not enough more 1 up to 2 cm every 24 hours. On the th day six post-partum, fundus normal located in the middle of the pubic symphysis and the uterine umbilicus will not be palpable Again with palpation abdomen after ninth day post-partum (Maryunani, 2011).

Results This comparable with study Andriyani (2015), with title "The Effect of Postpartum Exercise on Decline Tall Fundus Uteri On Post Partum Mothers", namely 15 respondents Which do exercise postpartum there are 11 person (73.3%) experience decline tall fundus uterus Which in accordance. Thereby case with study Astuti (2014), title "Influence Exercise Postpartum To Involution Uteri On Mother Postpartum in Public health center Jogonalan I Regency Klaten" respondents who implemented it exercise postpartum tend experience uterine involution is faster by 11 respondents (31.4%) whereas respondents Which No do gymnastics postpartum tend experience involution uterus slow as much 16 respondents (45.7%).

Results analysis bivariate obtained mark p 0,000 means $p < 0.05$ Which means that exercise postpartum effective on uterine involution in postpartum mothers in Aek Haruaya village, Portibi District, North Padang Lawas Regency. Mean rank value in the control group more tall that is as big as 7.22 show that Mother Which No do exercise postpartum possibility uterine involution is slower, meaning the mother who do postpartum exercise tend to experience involution uterus more fast compared to mothers who don't exercise postpartum.

Study This prove that Wrong One factor Which influence involution uterus is implementation exercise postpartum. Results This research is in accordance with that theory stated by Anggraini (2012), that benefit exercise postpartum is For return condition health, speed healing, prevent emergence complications, restore And repair strain on muscles after pregnancy, especially on muscles part back, base pelvis And stomach. Postpartum exercise can speed things up return parts muscle stomach, sexual canal, muscles around the vagin and muscles base pelvis to form normal.

Do exercise postpartum will affects muscle requirements oxygen Which where need

will increase, means need Genre strong blood like uterine muscle when done exercise postpartum will stimulate the contractions, so that contraction uterus will the more Good, expenditure lochia will fluent thereby influencing the involution process womb. Losses if you don't do it Postpartum exercises include infections due to involution uterus Which No Good so that remainder blood cannot be removed, bleeding Which abnormal, contractions uterus Good so that risk bleeding Which abnormal can avoided, venous thrombosis (blockage vein by clot blood), And arise varicose veins.

CONCLUSION

Based on results study can concluded that, the speed of involution events uterus on Mother postpartum Which No do exercise postpartum is slow. The speed of involution events uterus on Mother postpartum Which do postpartum exercise is fast. There is influence exercise postpartum to involution uterus on Mother postpartum, it can be seen that the P-value is 0.000 ($\alpha < 0.05$).

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