



## The Effect Of Early Mobilization On The Decrease In Fundus Uteri Height Of Postpartum Mothers At UPTD Bawomataluo Health Center

<sup>1</sup>Stilistika Nehe, <sup>2</sup>Ninsah Mandala Putri Sembiring

<sup>1,2</sup> Prodi Sarjana Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan

### ARTICLE INFO

#### Keywords:

Early Mobilization,  
Decrease in Uterine Fundis  
Height,  
Post Partum

#### Email :

stilistikanehe12@gmail.com  
ninsahputrimandalasembiri  
ng@gmail.com

### ABSTRACT

In postpartum mothers, uterine involution is a very important process because mothers need special care, assistance and supervision in order to recover health as before pregnancy. If TFU is above normal then this indicates bleeding in the uterus, this is very dangerous if the blood comes out profusely then the mother loses a lot of blood so that there can be shock until death. Early mobilization can speed up the process of lowering TFU, improve blood circulation and prevent the risk of thrombophlebitis. This type of research is a Quasi Experiment study which aims to determine the effect of early mobilization on reducing fundus uteri (TFU) height in Post Partum Mothers at UPTD Bawomataluo Health Center in 2022. The results of the Wilcoxon Signed Rank Test pre-test and post-test data fundus uteri high value with a Z value of 6,780 and a p-value of 0.001 where the p-value is smaller than 0.05 ( $0.000 < 0.05$ ), so we can conclude that  $H_a$  is accepted and  $H_o$  is rejected, which means that there is a difference between the height of the fundus uteri pre-test and post-test early mobilization Mrs. Post Partum. In conclusion, there is an effect of early mobilization on reducing fundus uteri (TFU) height in Post Partum Mothers at UPTD Bawomataluo Health Center. Based on the results of research conducted on the Effect of Early Mobilization on Decreasing the Fundus Uteri Height of Post Partum Mothers at UPTD Bawomataluo Health Center. The fundus uteri (TFU) high value of the pre-test for early mobilization is in the range of 10 cm – 14 cm with the majority of 14 cm, while in the pots-test for early mobilization is in the range of 9 cm – 14 cm with the majority of 12 cm. It is expected that health workers provide education and communication to improve the importance of early mobilization of postpartum mothers.

Copyright © 2023 COVID-19.

All rights reserved is Licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](#) (CC BY-NC 4.0)

## INTRODUCTION

Early mobilization is a process that is recommended for postpartum mothers 2-6 hours after giving birth because it greatly helps the healing process accelerate the decrease in fundus uterine height, facilitate lochea production, reduce puerperium infection, improve the function of the gastrointestinal organs and genitals, improve blood circulation so as to accelerate the function of breast milk and the release of metabolic waste, the mother feels healthy and strong, and intestinal and bladder faal is better (Andina Vita Susanto, 2019). During the postpartum period, there are many needs that are treated to accelerate the recovery of postpartum mothers, one of which is early mobilization. What is meant by early mobilization is 6 hours after giving birth, immediately get out of bed and move, to be stronger and better. Postpartum mothers find it difficult to mobilize early because mothers feel afraid of bleeding, and feel exhausted after giving birth. Mother's ignorance about early mobilization is one of the causes of mothers not wanting to do early mobilization, for that health education about early mobilization is needed so that the implementation of early mobilization can be carried out as much as possible (Suriniah, 2018).

Post partum is the period or time since the baby is born and the placenta is released out of the uterus, until the next 6 weeks accompanied by the recovery of organs related to the womb, which experience changes such as injuries and so on related to childbirth (Suherni, 2019).



The World Health Organization (WHO) states that the maternal mortality rate (MMR) in developing countries is still high at 500 per 100,000 live births. Based on data from the World Health Organization (WHO) in developing countries that the number of maternal deaths during pregnancy, childbirth, and postpartum is 2650 people (WHO, 2019). Maternal death by the WHO definition is death during pregnancy or within 42 days after the end of pregnancy, due to all causes associated with or aggravated by pregnancy or its treatment, but not caused by accident/injury. The leading causes of maternal death associated with obstetric complications during pregnancy, childbirth and postpartum are the majority of causes of maternal death. The Maternal Mortality Rate (MMR) is still very high in Indonesia. Every year, around 20,000 mothers in Indonesia die from pregnancy or childbirth complications. A total of 259 mothers die in every 100,000 live births. That's more than ten times the MMRs of Malaysia (19) and Sri Lanka (24). The Government's target is to reduce the maternal mortality rate to 102 per 100,000 live births by 2019 (Dianani, 2017).

Predisposing factors for uterine atony are uterus not contracting, flabby, too stretched and large, abnormalities in the uterus such as uterine myoma and placental abruption. The puerperium period is the period after labor and birth of the baby, placenta, and membranes needed to restore the uterine organs as before pregnancy with approximately 6 weeks. During the puerperium will experience changes both physical and psychic. Physical changes include ligaments - ligaments are soft and saggy, muscles are tense, uterus enlarges, posture changes as compensation for weight changes during pregnancy (Siswono, 2019).

Based on the results of research by Rista Apriana regarding the effect of early mobilization on reducing uterine fundal height in spontaneous postpartum mothers at Tugurejo Hospital Semarang in 2019, this study found that before early mobilization, the average fundus uteri height in the control group was 13.90 cm, while in the intervention group it was 13.60 cm after early mobilization, the average fundus uteri height in the control group was 12.75 cm, while in the group 11.60 cm intervention from the mannwhitney test obtained p value =  $0.000 < 0.05$ , then  $H_0$  was rejected and  $H_a$  was accepted. So the result is that there is an effect of early mobilization on the decrease in fundus uterine height in spontaneous postpartum mothers at Tugurejo Hospital Semarang.

In postpartum mothers, uterine involution is a very important process because mothers need special care, assistance and supervision in order to recover health as before pregnancy. An indicator in the process of involution is the height of the fundus uteri if the fundus uteri is above normal then this indicates that something happened in the uterus, namely bleeding in the uterus, this is very dangerous if the blood comes out profusely then the mother loses a lot of blood so that there can be shock until death (Bintariadi, 2018).

Early mobilization may be highly recommended for postpartum mothers because this will improve blood circulation and prevent the risk of thrombophlebitis, improve peristalsis and bladder work function so as to prevent constipation and urinary retention and the mother will feel healthy. The implementation of mobilization is carried out gradually and adjusted to the mother's condition. After labor is complete, the mother can begin ambulation with deep breathing exercises and simple leg exercises. Then it can be continued by sitting and shaking his legs on the bed. If the mother does not feel dizzy, the mother can continue walking (Sujiatini, 2019). From the results of the survey above at UPTD Puskesmas Bawomataluo in January-March there were 66 people who did not mobilize early 6-8 hours after giving birth, most of the reasons mothers did not mobilize early were due to feelings of fear of more bleeding, pain, weakness, and fear of the stitches coming off. Normal postpartum mothers who do not mobilize early will slow down the process of uterine involution so that in a decrease in uterine fundus height is delayed. The purpose of this study was to determine the effect of early mobilization on reducing the height of the fundus uteri of postpartum mothers at the Bawomataluo health center.

### METHOD

The type of research used in this study is *Quasi Experiment* research, which is an experiment that has treatment, measurement to find out the comparison in concluding changes caused by treatment.

*The Effect Of Early Mobilization On The Decrease In Fundus Uteri Height Of Postpartum Mothers At Uptd Bawomataluo Health Center. Stilistika Nehe, et.al*

This study was conducted with the design of the *Pretest* and *Posttest* approach, namely observation before and after treatment (Sugiyono, 2018).

Population is the overall object of study studied (Notoatmodjo, 2016). The population in this study was 149 people. All postpartum mothers who gave birth at UPTD Bawomataluo Health Center, Fanayama District, South Nias Regency 2022. The sampling technique used in this study is a *random* sampling technique, which is sampling where the population has the same opportunity to be taken as a sample, then a sample of 60 respondents.

### RESULTS AND DISCUSSION

Working Area of Bawomataluo Health Center, Fanayama District, South Nias Regency.

Table 1. Comparison of *Wilcoxon Signed Rank Test Pre-Test (Before)* and *Post-Test (After)* Results of Early Mobilization of Post Partum Mothers at UPTD Bawomataluo Health Center

| Variable      | X±SD    |          | Z     | p value | Results     |
|---------------|---------|----------|-------|---------|-------------|
|               | Pretest | posttest |       |         |             |
| Fundus Height | 12.77±  | 11.18±   | 6.780 | 0.001   | Ha Accepted |
| Uteri         | 1.294   | 1.334    |       |         |             |

In the *Wilcoxon Signed Rank Test*, *pre-test* and *post-test* results were obtained from the fundus uteri with a Z value of 6,780 with a *p-value* of 0.001. Thus the *p-value* test value is smaller than 0.05 ( $0.000 < 0.05$ ), so we can mean that *Ho* is rejected and *Ha* is accepted, there is a difference between the fundus uteri *pre-test* height and *post-test* early mobilization of Post Partum Mothers at UPTD Bawomataluo Health Center. The discussion in this case explains the results of a study on the Effect of Early Mobilization on the Decrease in Fundus Uteri Height of Post Partum Mothers at UPTD Bawomataluo Health Center in 2022 with 60 respondents as samples. Based on data on the characteristics of the frequency of responses according to age shown in table 4.1 shows that almost half the number of respondents were in the age range of 20-14 years as many as 29 respondents (48.3%).

The age of the mother during childbirth can affect uterine involution where the age of 20 to 30 years is the ideal age for a good involution process. This is due to the elasticity factor of the uterine muscles considering that mothers who are 35 years old are more elastic reduced at the age of less than 20 years the elasticity is not maximized due to immature reproductive organs while the age over 35 years often complications occur before and after birth due to the elasticity of the uterine muscles that have decreased (Siwi Elisabeth, 2019).

Based on frequency characteristics according to education, more than half of respondents graduated from elementary school (SD) as many as 36 samples (60%). Education also affects intellectual maturity on the insight of one's way of thinking both in action and decision-making in policy-making of highly educated mothers and better acceptance of health education its application in self-care, this situation will improve health recovery in the process of involution educational variables do not have a direct effect on the process of uterine involution. (Intan, Dwi & Leo, 2018).

According to the characteristics of the frequency of work, respondents showed that the majority of mothers worked as housewives (IRT) as many as 26 samples (43.3%). The value of fundus uteri (TFU) high measurement results before (*pre-test*) and after (*pots-test*) performs early mobilization. The fundus uteri (TFU) high value before (*pre-test*) early mobilization was in the range of 10 cm – 14 cm with the majority of 14 cm as many as 14 samples (41.6%). In measuring the fundus uteri (TFU) high value after (*pots-test*) early mobilization is in the range of 9 cm – 14 cm with the majority of 12 cm as many as 20 samples (33.3%). This shows a decrease in the value of fundus uteri height measurement in Post Partum Mothers at UPTD Bawomataluo Health Center after early

mobilization. This was also said by Ira Destiana in 2020 there was an influence of early mobilization on the decrease in fundus uterine height of post-SC mothers with an average decrease of 1 cm.

The results of the normality test (*Test of Normality*) using the *Shapiro-wilk* method can be seen *significancy data on fundus uteri* pretest height measurements of  $0.000 < 0.05$  and *fundus uteri posttest height measurements of  $0.000 < 0.05$*  thus the data are not normally distributed. Therefore, the data analysis used in this study is the *Wilcoxon Signed Rank Test*. Results on the *Wilcoxon Signed Rank Test pre-test and post-test*. The results of testing fundus uteri high-value data with a Z value of 6,780 with a p-value of 0.001. Thus, the p-value test value is smaller than 0.05 ( $0.001 < 0.05$ ), so we can conclude that *Ha is accepted and Ho is rejected, which means that there is a difference between the fundus height of the pre-test uteri and post-test early mobilization of Post-Partum Mothers at UPTD Bawomataluo Health Center*. This research is also in line with research conducted by Intan, Dwi and Leo in 2018 entitled differences in early mobilization to accelerate the decline in uterine fundus height in postpartum mothers on the first and second days in the Melati room of Jombang Hospital. The results of the study said that almost all respondents of the intervention group accelerated the decline in the height of the fundus uteri rapidly as many as 14 respondents (87.5%). This researcher stated that there was a difference in early mobilization to accelerate the decline in uterine fundus height in postpartum mothers on the first and second days in the Melati room of Jombang Hospital (Intan, Dwi & Leo, 2018).

In the article, Sulminah (2021) also said that there is an influence of early mobilization on uterine involution in postpartum mothers. Having an early mobilization can provide benefits to postpartum mothers who can help in the process of uterine involution after childbirth. In addition, early mobilization can improve blood output and placental residue can have an impact on reducing TFU. Early mobilization is an effort to maintain independence, perhaps by guiding the patient to maintain physiological function, mobilization, causing improved circulation, making deep breaths, and stimulating normal gastrointestinal function again. With early mobilization, uterine contractions will be good so that the uterine fundus is hard, the risk of abnormal bleeding can be avoided because contractions narrow open blood vessels (Siwi Elisabeth, 2019).

### CONCLUSION

Based on the results of research conducted on the Effect of Early Mobilization on Decreasing the Fundus Uteri Height of Post Partum Mothers at UPTD Bawomataluo Health Center. The fundus uteri (TFU) high value *of the pre-test for early mobilization is in the range of 10 cm – 14 cm with the majority of 14 cm, while in the pots-test for early mobilization is in the range of 9 cm – 14 cm with the majority of 12 cm*. There is an effect of early mobilization on the decrease in fundus uteri height of postpartum mothers at UPTD Bawomataluo Health Center. For midwives and nurses at UPTD Puskesmas Bawomataluo, it is hoped that they can implement and motivate postpartum mothers and develop professional values of service so as to improve the quality of service.

### REFERENCES

- Andina Vita Susanto. 2019. Asuhan Kebidanan Nifas dan Menyusui .Yogyakarta : PT Pustaka Baru Press.
- Bahiyatun, 2018., Buku Ajar Asuhan Kebidanan Nifas Normal, Monica Ester, Jakarta : EGC.
- Aziz Alimul Hidayat, (2019). Metodologi Penelitian Kebidanan dan Teknik Analisis Data. Salemba Medika : Jakarta.
- Bobak, ddk., 2019. Keperawatan Maternitas., Jakarta : EGC.
- Brunner dan Suddha. (2018). Keperawatan Medikal Bedah. Volume 3. Jilid 8. Jakarta : EGC.
- Capernito, L, J (2018). Buku Saku Asuhan Keperawatan. Jakarta : EGC.
- Dede Mahdiyah, (2018). Hubungan Mobilisasi Dini Dengan Penurunan Tinggi Fundus Uteri Pada Ibu Post Partum di Blud RS.H Moch Ansari Saleh Banjarmasin.



- Desti Gita Sari, Fitria Rahmawati, (2019). Hubungan Antara Mobilisasin Dini Dengan Involusio Uterus di Puskesmas Toroh 1.
- Diah Atmariana Yuliani, Khamidah Achyar, (2018). Hubungan Mobilisasi Dini Dengan Involusio Uterus Pada Ibu Post Partum Spontan di Wilayah Kerja Puskesmas.
- Elisabeth, Th. Endang. Margareth. 2019. Asuhan Kebidanan Masa Nifas dan Menyusui. Yogyakarta : PT Pustaka Baru Press.
- Intan Rizky Yunitarini, (2019). Perbedaan Mobilisasi Dini Terhadap Percepatan Penurunan Tinggi Fundus Uteri Post partum Normal. Studi Ruangan Melati RSUD Jombang.
- Jenni Diana A. H. S, (2017). Perbedaan Penurunan Tinggi Fundus Uteri pada Ibu Post Partum Primigravida Yang memberikan dan Tidak Memberikan ASI Eksklusif di RS. Pantiwilasa Citarum Semarang.
- Mariah Ulfah,; Maya Safitri (2018) Perbedaan Penurunan Tinggi Fundus Uteri Masa Nifas Sebelum dan Sesudah Latihan Otot Dasar Panggul. Rakernas Aipkema.
- Notoatmojo, S. 2016, Metodologi Penelitian Kesehatan Ed Rev., Rineka Cipta : Jakarta.
- Rista Apriana, Priharyanti Wulandari, Novita Putri Aristika, (2019). Pengaruh Mobilisasi Dini Terhadap Penurunan Tinggi Fundus Uteri Pada Ibu Post Partum Spontan di RSUD Tugerejo Semarang.