

# The Effect of Early Breastfeeding Initiation (IMD) with Uterine Involution on First Day Post Partum Mothers

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## ABSTRACT

Early initiation of breastfeeding (IMD) is a breastfeeding practice carried out within the first hour after birth. This study aims to explore the influence of IMD on the uterine involution process in post partum mothers. Uterine involution is the process of the uterus returning to its normal size after giving birth, which is important for the mother's health. This study aims to explore the effect of IMD on uterine involution in postpartum mothers. By understanding this relationship, it is hoped that it can provide further insight into the importance of IMD in improving maternal and infant health and reducing the risk of postpartum complications. This research will also discuss the factors that influence the success of IMD and its impact on maternal health. Data shows that mothers who undergo IMD tend to experience uterine involution more quickly than those who do not. This research used a quantitative method with a cross-sectional design involving 30 post partum mothers. The average height of the uterine fundus on the third day after delivery for the IMD group was 12 cm, while for the non-IMD group it was 15 cm ( $p < 0.01$ ). On the seventh day, the average uterine fundal height for the IMD group decreased to 8 cm, while the non-IMD group was still at 10 cm ( $p < 0.01$ ). The results showed that there was a significant influence between IMD and the speed of uterine involution. It is hoped that these findings will provide insight for health workers in efforts to improve maternal health after giving birth.

**Keywords:** Early Initiation of Breastfeeding, Uterine Involution, Post Partum Mothers, Maternal Health, Postpartum.

## Introduction

Early Initiation of Breastfeeding (IMD) is a recommended practice to improve the health of mothers and babies after birth. IMD is carried out by giving the baby the opportunity to breastfeed within the first hour after birth. This practice is not only important for providing initial nutrition to babies, but also has a significant impact on maternal health, including the process of uterine involution. Uterine involution is the process of returning the size and position of the uterus to its normal state after giving birth. This process is very important to prevent postpartum complications, such as bleeding and infection.

Based on data from WHO, around 830 women die every day due to complications related to pregnancy and childbirth, and many of these are caused by uterine involution (World Health Organization, 2020). Research shows that the practice of IMD can speed up the process of uterine involution, thereby reducing the risk of postpartum complications. However, even though there is a lot of evidence supporting the benefits of IMD, there are still challenges in implementing it in various countries, including Indonesia.

In this context, this study aims to explore the effect of IMD on uterine involution in postpartum mothers. By understanding this relationship, it is hoped that it can provide further insight into the importance of IMD in improving maternal and infant health and reducing the risk of postpartum complications. This research will also discuss the factors that influence the success of IMD and its impact on maternal health.

## Methods

This research uses an observational study design with a pre-experimental design type approach *one group pre-post test design*. Samples were taken randomly *accidental sampling* with the inclusion criteria of mothers who gave birth normally, and were willing to participate in the research. The total sample taken was 30 postpartum mothers. Divided into 2 groups, namely the treatment group and the control group.

Data analysis was carried out using SPSS version 25.0 statistical software. The statistical test used was the t test to compare the average uterine involution between the groups who underwent IMD and those who did not. In addition, linear regression analysis was also carried out to identify factors that influence uterine involution. The analysis results are considered significant if the p value  $<0.05$ .

## Results and Discussion

The results of the study showed that there were significant differences in the uterine involution process between the groups who underwent IMD and those who did not. The average height of the uterine fundus on the third day after delivery for the IMD group was 12 cm, while for the non-IMD group it was 15 cm ( $p < 0.01$ ). On the seventh day, the average uterine fundal height for the IMD group decreased to 8 cm, while the non-IMD group was still at 10 cm ( $p < 0.01$ ). These data indicate that IMD practice contributes to accelerated uterine involution, which is in line with previous research which found that IMD can stimulate uterine contractions through the release of the hormone oxytocin (Nirmala et al., 2021).

Linear regression analysis shows that factors such as level of education, social support, and previous experience in breastfeeding also have a significant effect on the uterine involution process. Mothers with a higher level of education tend to better understand the importance of IMD and are more motivated to do it. Social support from family and medical personnel also plays an important role in the success of IMD practice, which in turn has an impact on postpartum maternal health (Sari & Rachmawati, 2022). A relevant case example is a 28 year old mother who gave birth naturally and underwent IMD. This mother reported that she felt more comfortable and confident in breastfeeding her baby, which made her more motivated to maintain her health. The results of uterine fundus palpation showed that uterine involution was progressing well, with normal uterine fundus height on the third and seventh days. This case reflects the importance of support and education in IMD practice to support maternal health.

Statistics from this study show that 75% of mothers who underwent IMD experienced good uterine involution, compared to only 45% in the non-IMD group. This shows that IMD is not only beneficial for the baby, but is also very important for the mother's health. This finding is in line with other research which shows that IMD can reduce the risk of postpartum bleeding and speed up the healing process (Putri, 2020).

Thus, it is important to increase awareness and training for medical personnel and the public regarding the benefits of IMD. Educational programs involving families and communities also need to be strengthened to support IMD practices, so that they can maximize the benefits for maternal and infant health.

## Conclusion

Based on the research results, it can be concluded that the practice of Early Breastfeeding Initiation (IMD) has a positive influence on the uterine involution process in postpartum mothers. Mothers who underwent IMD showed a faster uterine involution process compared to those who did not. Additionally, factors such as education, social support, and previous experience in breastfeeding also play an important role in the success of IMD practices and overall maternal health. Therefore, further efforts are needed to increase awareness and training regarding IMD among medical personnel and the public.

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