THE RELATIONSHIP OF EARLY BREASTFEEDING INITIATION (IMD) TO POST PARTUM UTERINE INVOLUTION IN THE INDEPENDENT PRACTICE OF MIDWIVES (PMB) MARIYAH ULFAH EAST JAKARTA

Meysa Pratiwi 1), Aris Prastyoningsih 2), Tresia Umarianti 3)

¹Department Of Physiology Kusuma Husada University Surakarta ²Department Of Anatomical Pathology Kusuma Husada University Surakarta ³Educational Programs Of Kusuma Husada University Surakarta

meysapratiwii22@gmail.com

ABSTRACT

Early breastfeeding initiation (IMD) is one of the factors that influence uterine involution. IMD can stimulate and release hormones, including the hormone oxytocin, which functions in addition to stimulating contraction of breast smooth muscles, also causes contraction and retraction of uterine muscles. This will compress the blood vessels resulting in reduced blood supply to the uterus. In women who choose to breastfeed their babies, the baby's suction will stimulate the release of oxytocin and help the uterus return to its normal shape.

This study aims to determine the relationship of Early Breastfeeding Initiation (IMD) to uterine involution in post partum at PMB Mariyah Ulfah East Jakarta which was conducted in May-August 2024. The type of research used in this study is quantitative research. This study used a Cross Sectional approach. The sample technique used in this study was total sampling of 30 people. The research instruments used were metline and observation sheet.

The results of this study identified that there was a difference in TFU reduction in mothers who did, Early initiation of breastfeeding (IMD) and those who did not do IMD, so there was a relationship between Early Breastfeeding Initiation (IMD) to Uterine Involution during the nifaas period at PMB Mariyah Ulfah East Jakarta, where the p-value = 0.006 (0.006 < 0.05).

Keywords: Postpartum Mother, Early initiation of breastfeeding (IMD), Uterine Involution

Introduction

During the puerperium lasts all the tools that are outside the uterus and inside will slowly return to the way it was before pregnancy. The change that occur in the entire genetic apparatus I alo called involution. Naturally during pregnancy the uterus semantically day semantically

enlarges. After childbirth, the uterus will shrink back slowly to its original shape. (Hutajulu et al., 2024).

According to the World Health Organization said that the maternal mortality rate worldwide 2016/100, 000 live births, Asia estimated maternal mortality rate of 164/100, 000 live births each year. The incidence of maternal mortality is mostly found in

developing countries which is 98% -99% where maternal mortality in developing countries is 100% higher than in developed countries (WHO, 2020).

According to the DKI Jakarta Provincial Health Profile in 2021, the city with the highest number of maternal deaths was East Jakarta with 44 cases. It was recorded that the causes of maternal death were bleeding 18 cases, hypertension in pregnancy 22 cases, and others 104 cases. In this data, the biggest cause of maternal death is from other factors, labor pain is one of them. That the pain experienced by laboring women becomes an inhibiting factor in the labor process, causing anxiety in the mother and fatigue, causing oxygen demand to increase, this can affect the fetus until fetal death (Widyastutik, 2021).

Early breastfeeding initiation (IMD) is the process of placing the newborn on the mother's chest or stomach so that the baby can naturally find its own sourceof breastmilk. Early initiation of breastfeeding (IMD) is one of the factors affecting uterine involution. At uterine involution process is very important and should go well. If the process of uterine involution does not go well it will cause acondition called subinvolution. The incidence of uterine subinvolution that causes postpartum hemorrhage in developed countries is about 5% of births while developing countries are 28% of births and become themain cause of maternal mortality (Mazidah & Mulyaningsih, 2015).

Early initiation of breastfeeding can stimulate and release hormones, including the hormone oxytocin, which functions in addition to stimulating contraction of breast smooth muscles, also causes contraction and retraction of uterine muscles. This will compress the blood vessels resulting in reduced blood supply to the uterus. This process can help to reduce the site or place of placental implantation and reduce bleeding. (Nasution, 2021).

Methods

The type of research used in this study is quantitative research. The research design used by the researchers in this study is observational analytic research that tries to explore how and why the phenomenon of

healthiness occurs. This study uses a Cross Sectional approach, meaning that all variables that include effects will be studied and collected at the same time (Hardani, 2017).

The sampling technique used in this study is a total sampling of 30 people. Post partum mother at PMB Mariyah Ulfah East Jakarta. This study involves sample selection based on certain criteria that must be met by the subject so that the sample can be included in this study, namely Inclusion criteria such as maternity mothers who are willing to be respondents, postpartum mothers who do IMD, and can communicate well. This researcher used observation sheets in data collection using medline to measure uterine involution.

Results

The number of samples analyzed as many as 30 respondents. Table 4.1 overview of the characteristics of respondents based on age, parity, education, and employment in PMB Mariyah Ulfah East Jakarta

Table 4.1 overview of the characteristics of respondents by age, parity, education, and employment

Characteristics	frequency	percentage %		
	(F)			
Age				
Age 17-25 years	8	26,7		
age 26-35 years	15	50,0		
age 36-45 years	7	23,3		
•.				
parity				
Primiparous	11	36,7		
multiparous	19	63,3		
Education				
Elementary	3	10,0		
Junior	9	30,0		
High School	14	46,7		
College	4	13,3		
occupation				
Teacher				
Employees	1	3,3		
IRT employee	3	10,0		
• •	26	86,7		

Based on the results of Table 4.1 shows that in terms of the age of the majority of respondents aged 26-35 years as many as 15 respondents (50.0%) and a minority aged 36-45 years as many as 7 respondents (23.3%). Parity of multiparous majority respondents was 19 respondents (63.7,7%) and primiparous minority was 11 respondents (36.7%). Education respondents majority of high school as many as 14 respondents (46.7,7%) and a minority of elementary school as many as 3 respondents (10.0%). The majority of Housewives work as many as 26 respondents (86.7,7%) and a minority of teachers as many as 1 respondent (3.3 %).

Table 4.5 distribution of early initiation of breastfeeding (IMD)

Criteria	Frequency	Presentaase		
	(F)	(%)		
Performed	18	60.0		
Not	12	40.0		
Performed				
Total	30	100.0		

Based on the results of Table 4.5 shows that of the 30 respondents who did IMD as many as 18 respondents (60.0%) and not done IMD as many as 12 respondents (40.0%).

Table 4.6 Distribution Of Uterine Involution

Criteria	Frequency	Percentage		
	Criterion (F)	(%)		
Normal	21	70.0		
Abnormal	9	30.0		
Total	30	100.0		

Based on the results of Table 4.6 shows that of 30 respondents, the number of respondents with normal TFU as many as 21 respondents

(70.0%) while the abnormal as many as 9 respondents (30.0%).

Table 4.7 Relationship Of IMD With Uterine Involution

IMD	Tinggi Fundus Uteri (TFU)				Jumlah		P- value
	Normal		Tidak Normal				
	F	%	F	%	F	%	
Dilakukan	16	88,9	2	11,1	18	100,0	0,006
Tidak Dilakukan	5	41,7	7	58,3	12	100,0	
Total	21	70,0	9	30,0	30	100,0	

Based on Table 4.7 shows that from 18 respondents who initiated breastfeeding, the majority of normal is 16 respondents (88.9%), while from 12 respondents did not initiate breastfeeding the majority of abnormal TFU is 7 respondents (58.3%). Statistical test results obtained p-value 0.006 indicates that the p-value <0.05,05 which means there is a early relationship of initiation breastfeeding (IMD) with uterine Involution.

Discussion

Based on research that has been done, it was found that of the 30 respondents, the majority aged 26-35 years as many as 15 respondents (50.0%) and a minority aged 36-45 years as many as 7 respondents (23.3%). Mothers aged <20 years and > 35 years are considered at risk for his disorder. Age <20 years uterine contractions respond to hormonal body is not functioning optimally because of the system of reproduction is not Age >35 years there will be a progressive deterioration of the endometrium resulting in reduced absorption of nutrients that can cause the uterus to not contract properly. Aging processes that increase the amount of fat in older mothers, have a significant impact on the process of involution. Muscle flexibility is reduced, as is flabby Maternal age between 20-30 years old is a good age to give birth because the

reproductive organs are functioning properly (Indriyani et al., 2023).

Characteristics of respondents based on parity are primiparous mothers as many as 11 respondents (36.7,7%) and multiparous mothers as many as 19 respondents (63.3%). This is in accordance with the results of research conducted by Samantha (2019), There are several factors that can affect the process of uterine involution, one of which is parity. This is because mothers who have given birth to a child of 2-4 people usually become more slowly involved, because the more often pregnant the uterus will often strain

Education means the guidance given by a person towards the development of others towards an ideal. The higher the level of education, the easier it is to receive information, so the mother's ability to think more rationally. Maternal education greatly affects how a person to act and look for causes and solutions in his life. The results of the study can be seen that most of the respondents came from secondary education, namely high school as many as 14 respondents(46.7%), Junior High Education as many as 9 respondents (30.0%), universities as many as 4 respondents (13.3%), and elementary education as many as 3 respondents (10.0%).

Dictionary of Education states that education is paroses in which a person develops the ability of attitudes and other forms of behavior in the society in which they live. The level of education is a factor that underlies decision making and the outcome of labor is also supported by the level of maternal knowledge about health (Budiman, 2017).

Based on the work of 30 respondents, as many as 26 respondents (86.7%) are not working (Housewives), as many as 3 respondents (10.0%) are private employees, and as many as 1 respondent (3.3,3%) is a teacher. Based on this study Almost all respondents do not work or as housewives.

Work does not directly affect the process of uterine involution but through nutrition can affect uterine involution. Postpartum women who work have a good ability in the economy and have the purchasing power of daily food which can have an impact on nutritional fulfillment (Anggraini, 2023).

Based on the research that has been done, it was found that of the 30 respondents who experienced normal uterine involution as many as 21 respondents (70.0%) and who experienced abnormal uterine involution as many as 9 respondents (30.0%). Normal uterine involution is the process of shrinking the uterus back to its normal size after childbirth, which is like its shape before pregnancy. Early initiation of breastfeeding (IMD) is one of the factors that favor the process of uterine involution. With the baby sucking the mother's nipple there is stimulation to the formation of milk which indirectly stimulates suction to help speed up the reduction of the uterus, because the suction of the nipple will stimulate the release of oxytocin. This oxytocin hormone causes uterine muscle contraction and reaction, thus triggering the uterus to return to its original (Friedrich, 2019).

The results of this study are supported by Nasution's research (2021) on the relationship between IMD and Uterine Involution at PMB Nelly Harahap, that there were 9 respondents (69.2%) out of 13 respondents who initiated early breastfeeding. The results showed that the process of normal uterine involution as many as 12 respondents (46.2,2%) and abnormal uterine involution as many as 14 respondents (53.8%).

After delivery, oxytocin is secreted from the posterior pituitary gland and acts on the uterine muscles helping the detachment of the placenta. After detachment of the placenta and uterine cavity will shrink inward. Oxytocin is one of the hormones produced by the posterior pituitary that will be released into the blood vessels when getting the right stimulation. The physiological effect of the hormone oxytocin is to stimulate uterine smooth muscle contraction in the puerperium so that it will accelerate uterine involution. In addition, oxytocin also has an effect on the mother's breast, which increases milk production from the pain glands. In lactating women, involution usually occurs more efficiently (Nasution, 2021).

The things that cause mothers who cannot breastfeed their babies after going through the labor process are the mother'S milk does not come out, the mother's nipples are flat or sinking, and psychological disorders in post partum mothers such as post

partum blues so that mothers do not want to breastfeed their babies (Intan Sari, 2019).

From the results of research and theories above, the authors argue that respondents, especially primiparous mothers need to be given greater information and support so that the process of early initiation of breastfeeding can be carried out properly because it provides many benefits for mothers and babies and increases the chances of mothers to continue breastfeeding during infancy.

From the results of research that has been conducted on 30 respondents about uterine involution on the seventh day, the results of mothers with normal involution as many as 21 respondents (70.0%) and mothers with abnormal involution as many as 9 respondents (30.0%). The lactation process has a direct influence on uterine involution. mothers Puerperal who exclusively breastfeed have a higher chance of uterine experiencing involution than puerperal mothers who do not breastfeed. If the process of involution is hampered, it can cause the uterus to be late to return to its original shape. This is because there are mothers who do not breastfeed, mothers lack placental delay mobilization, no contractions, weak perinium muscle and (Anggraini, 2023).

The process of involution is seen from the height of the uterine fundus on the seventh postpartum day. According to Roesli (2018) when the baby is placed on the mother's stomach or chest immediately after birth and skin contact occurs (skin to skin) the baby will react due to the stimulation of the mother's touch. Peripheral concentrations of oxytocin in the maternal cycle appear to be higher in the first hour than in the unborn. This is what helps speed up the process of uterine involution. The intensity of uterine contractions will increase as soon as the baby is born. Oxytocin is a hormone that can stimulate the uterine myometrium so that it can contract. Uterine contraction is a complex process and occurs due to the meeting process between actin and myosin. Oxytocin is a hormone that increases the entry of calcium ions into the intra-cell so that the presence of the hormone oxytocin will strengthen uterine contractions (Ambarwati, 2016).

This is in line with research Puspita (2023), about the relationship between early initiation of breastfeeding (IMD) with a decrease in the height of the uterine Fundus in postpartum mothers showed that there is a significant relationship between initiation of breastfeeding (IMD) with a decrease in the height of the uterine fundus in postpartum mothers with value =0,000 < of valuea = 0.05 Roger that. From the results of research and theories above, the authors argue that respondents who involution on the seventh day is not normal as many as 9 respondents (30.0%), most of the slow involution occurs in respondents who do not initiate early breastfeeding, but it also occurs respondents who initiate breastfeeding although in a little more volume. This happens because there are several other factors that influence such as mothers do not do puerperal Gymnastics, disturbed maternal psychology, mothers lack of mobilization, nutritional status, parity, and usiamaternal age.

Based on the results of the study, it can be seen that the seventh day postpartum mothers of 18 respondents performed IMD obtained the results that the majority of normal uterine involution as many as 16 respondents (88.9%), while of 12 respondents did not performed IMD majority of abnormal uterus as many as 7 respondents (58.3%). Significant relationship between breastfeeding and uterine involution in postpartum mothers can be seen from the results of analysis using The Chi Square test and obtained *p-value* = 0.006 < a (0.05), it can be concluded that there is a significant relationship between breastfeeding and uterine involution in post-partum mothers.

The results of this study are also in accordance with the theory Indriyani (2023), that the involution process can occur faster in mothers who initiate early breastfeeding compared to those who do not initiate early breastfeeding. There are several factors that can affect involution, namely usiamaternal age, mobilization, puerperal Gymnastics, maternal psychology, and nutritional status. When the baby sucks the mother's nipple, there is a stimulation of the formation of breast milk which indirectly stimulates suction so that it helps accelerate the shrinking of the uterus because the suction of the nipple will stimulate the release of the

hormone oxytocin so that uterine muscle contractions and retractions occur and trigger the uterus to return to its original shape.

Early initiation of breastfeeding is one of the factors that affect the process of uterine involution, in the study there are still respondents whose uterine involution process is slow because they do not initiate early breastfeeding, akanbut there are also respondents who do not initiate early breastfeeding but involution continues to run normally. This is because puerperal mothers do a lot of activity and light mobilization after giving birth, as well as different nutritional status in each respondent and there are postpartum mothers who initiate breastfeeding early but slow uterine involution. Maternal age is also one of the factors that affect uterine involution, this is due to the reduced uterine muscle flexibility factor at maternal age > 35 years so that it has impact on the uerus involution process(Indriyani et al., 2023).

According to research Anggraini(2023), research has been conducted on factors affecting uterine involution in puerperal mothers there are direct and indirect factors. Direct factors affecting uterine involution are early initiation of breastfeeding (IMD), early mobilization, nutritional status and lactation process while indirect factors on uterine involution are influenced by education and work.

From the results of research and theories above, there is a relationship between early initiation of breastfeeding with uterine involution, with early initiation of breastfeeding when the baby begins to suck the mother's breast, it will help the production of excess oxytocin hormone so that contractions arise in the smooth muscles of the uterus that can help the process of uterine involution and such as lactation process, early mobilization and nutritional status.

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Based on the results of the research on the Relationship between Early Breastfeeding Initiation (IMD) to Uterine Involution in Post Partum at PMB Mariyah Ulfah East Jakarta, namely the characteristics of respondents based on age, the results obtained from 30

respondents, the majority of mothers aged 26-35 years as many as 15 respondents (50.0%). Based on the parity of postpartum mothers, the majority of mothers are multiparous as many as 19 respondents (63.3%). Maternal education greatly affects how a person acts and looks for causes and solutions in his life. The results of the study can be seen that most respondents came from secondary education, namely high school as many as 14 respondents (46.7%). Most of the respondents who initiated early breastfeeding were 18 people (60.0%) and those who did not initiate early breastfeeding were 12 people (40.0%). The process of uterine involution in post partum mothers on the seventh day, most of the respondents were normal, totaling 21 people (70.0%). Factors that directly influence uterine involution are early breastfeeding initiation. early mobilization, and lactation process, while indirect influence on uterine involution is education and work. There is a relationship between Early Breastfeeding Initiation (IMD) and Uterine Involution during the nifaas period at PMB Mariyah Ulfah East Jakarta, where the p-value = 0.006 (0.006) <0.05).

Advice

The aim is to educate midwives who are capable and can actively involve the community in the initiative to initiate early breastfeeding to reduce uterine involution in postpartum women. Adding information, broadening horizons, and becoming an additional library resource for Kusuma Husada University, especially midwifery study programs.

Hopefully, the findings of this study can be a reliable source of information and can be used as input for further research efforts and pay attention to other factors that affect progress, so look for respondents who can cooperate well so as not to affect the course of research.

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