THE CORRELATION OF TWO MONTHS FULL OF BREASTFEEDINGON EARLY INITIATED BREASTFEEDING GROUP WITH PUERPERIUM BLEEDING

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ABSTRACT

Introduction: Postpartum bleeding is one of the main causes of mortality in mothers in 2017. Based on Profil Kesehatan Provinsi Jawa Timur's data in 2017, about 28,26% of mothers' mortality percentage is because of postpartum bleeding. Some of the factors affecting the duration of puerperium bleeding are the initiation of early breastfeeding and exclusive breastfeeding. Early breastfeeding initiation can stimulate the oxytocin hormone to contract the uterine and help complete the extrusion of the placental site and sloughing of decidua tissue (lochia).
Purpose: This study aims to know the correlation of 2 months full of breastfeeding on early initiated breastfeeding group with puerperium bleeding.
Method: This study is an observational analytical study where the design is cohort retrospective, and the 60 samples used in this research are taken with simple random technique sampling. This research was carried out by collecting information from secondary data, and the whole process was done in Gotong Royong Hospital Surabaya from July to September 2020. This research used the Mann-Whitney U test to analyze and find the correlation of both variables.
Results: Based on the statistic test, there is no correlation between both variables, resulting in p = 0,211.
Conclusion: there is no significant correlation between 2 months full of breastfeeding on the early initiated breastfeeding group withpuerperium bleeding.

Keywords: Puerperium bleeding, early initiation of breastfeeding, breastfeeding.

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INTRODUCTION

The postpartum or puerperium period is the period immediately after childbirth up to 6 weeks, during which time the anatomy and physiology of the mother's reproductive tract return to normal. The reproductive organs gradually return to their pre-pregnancy state during the postpartum period.[1] One of the changes in the reproductive organs is the involution of the uterus. Uterine involution or uterine contractions are processes by which the uterus returns to its pre-pregnancy state. If the uterine involution is normal, it will reduce the incidence of bleeding, especially postpartum hemorrhage, which is one of the direct causes of maternal death.[2]

Based on data obtained from Profil Kesehatan Provinsi Jawa Timur in 2017, the Maternal Mortality Rate (MMR) tends to increase, reaching 91.92 per 100,000 live births. The causes of maternal mortality in 2017 included other causes (29.11%), pre-eclampsia/eclampsia (28.92%), bleeding (26.28%), and infection (3.59%). These results show that maternal death due to bleeding is one of the three highest causes of maternal death.[3]

The postpartum period is called the critical period for both mother and baby. It can be estimated that 60% of maternal mortality in Indonesia occurs during postpartum or the puerperium period. Several factors that influence uterine involution include postpartum exercise, early mobility of postpartum mothers, early breastfeeding initiation, exclusive breastfeeding, maternal nutrition, psychological factors and age, and parity factors.[2]

Early initiation of breastfeeding is when the baby begins to breastfeed itself after birth by placing the newborn on the mother's breast so that skin-to-skin contact can occur within the first 30 minutes-1 hour of life. Newborns have a sucking reflex that allows them to suck, swallow, and suckle immediately after birth. Skin-to-skin contact immediately after birth can create a good relationship between the baby and the mother.[4]

In addition to providing benefits for babies, the implementation of early initiation of breastfeeding and exclusive breastfeeding also provides benefits for mothers. Performing early initiation of breastfeeding immediately after birth has an important role in the physiological changes in the mother. Shortly after the baby is first placed on the mother's breast, the baby will reflex the sucking, which stimulates the release of the oxytocin hormone. The oxytocin hormone is produced by neurohypophysis and functions to excrete breast milk. In addition to releasing breast milk, this hormone also has a role in causing uterine contractions.[5] Implementation of early initiation of breastfeeding can help speed up the process of uterine contractions so that the risk of postpartum bleeding is lower and the uterus can return to its pre-pregnancy shape in a shorter time.

Data obtained from the Ditjen Kesehatan Masyarakat, Kemenkes RI in 2019 stated that the percentage of newborns in Indonesia in 2018 who received early breastfeeding initiation was 71.34% and for those who received exclusive breastfeeding was 65.16%.[6]

Gotong Royong Hospital (RSGR) was chosen as the place for this research is to be carried out because most visitors to this hospital are pregnant women, children, and toddlers. RSGR is a teaching hospital for Widya Mandala Catholic University Surabaya Faculty of Medicine students. This study wanted to determine the correlation of two months full of breastfeeding on early initiated breastfeeding group with puerperium bleeding. Breastfeeding for two months is done because the puerperal period extends to about six weeks.

METHOD

The type of study used in this research is an observational analytic study, which observes the research subject to find the relationship between variables. The study

design used was a retrospective cohort method regarding the correlation of two months full of breastfeeding on early initiated breastfeeding group with puerperium bleeding. The population of this study was pregnant women who gave birth at Gotong Royong Hospital Surabaya. The sample of this study was pregnant women who gave birth at Gotong Royong Hospital Surabaya who met the inclusion criteria in the July 2019-January 2020 period. The sampling technique in this study was conducted using simple random sampling technique.

The inclusion criteria in this study were mothers who gave birth at Gotong Royong Hospital Surabaya during the July 2019-January 2020 period, mothers who did early breastfeeding initiation. These babies received two months of full breastfeeding or not. The exclusion criteria in this study were babies born unhealthy. These babies had congenital abnormalities and bad conditions (respiratory problems, sepsis, seizures), so they had to use breathing devices.

RESULTS

Based on the research that was conducted, the following describes the data on the characteristics of the respondents in the form of respondent's age, parity, breastfeeding pattern for two months, and the duration of puerperium bleeding.

Tabel 1. Characteristics of Respondents

Variables	Frequency (n)	Percentage (%)
Age (years)		
20-25	9	15
26-30	36	60
31-35	12	29
36-40	3	3
Parity		
Primiparous	33	55
Multiparous	27	45
Breastfeeding Pattern		
2 months full of breastfeeding	41	63,8
Not 2 months of full breastfeeding	19	31,7
Duration of Puerperium Bleeding (Weeks)		
<2	3	5
2-4	42	70
>4-6	15	25

Based on the table above, it is found that the age group with the most respondents is the 26-30 year age group, with 36 respondents (60%). Distribution based on parity was found that the largest group was the primiparous mother group, with 33 respondents (55%). The frequency of breastfeeding pattern for 2 months full of breastfeeding among respondents who participated in the study found that the largest group was the group who did early initiation of breastfeeding and continued with 2 months full of breastfeeding, with 41 respondents (68,3%).

Tabel 2. Correlation of 2 Months Full of Breastfeeding on Early Initiated of Breastfeeding Group with Puerperium Bleeding

Breastfeeding pattern	Duration of puerperium bleeding (weeks)				
	<2 (%)	2-4 (%)	>4-6 (%)	Total (%)	P value
Early initiation of breastfeeding continued with 2 months full of breastfeeding	2 (4,9)	31 (75,6)	8 (19,5)	41 (100)	
Early initiation of breastfeeding continued with not 2 months full of breastfeeding	1 (5,3)	11 (57,9)	7 (36,8)	19 (100)	0,211
Total	3	42	15	60	

The analysis test results using the Mann-Whitney U test obtained a significance value or p-value = 0.211. This suggests no significant correlation between 2 months full of breastfeeding on the early initiation of breastfeeding group with puerperium bleeding. The relationship between the two variables is significant if the p-value is <0.05. So, from the results of the analysis test carried out, the conclusion is that the research hypothesis is rejected.

DISCUSSION

The duration of puerperal bleeding can be affected by the rate or velocity of uterine contractions. Several factors, including maternal age, parity, implementation of early initiation of breastfeeding, and exclusive breastfeeding, have a role in influencing the rate of uterine contractions.[7]

In this study, based on the age distribution of the group, the dominant number of respondents was the group of respondents aged 26-30 years, with 36 respondents (60%). The second dominant age is respondents aged 31-35 years, as many as 12 respondents (12%). According to research conducted by Indah Rohmawati, Ratna Kholidati, Any Masruroh, et al. in 2019 at Dr. Iskak, Tulungagung Regency, the declared age range was declared safe for childbirth was 20-35 years. This is because the group of mothers in the age range of 20-35 years has uterine muscles whose elasticity is still in good condition to maximize uterine contractions during labor and after delivery. [8]

Based on the parity distribution of the group, the largest number of respondents was the group of mothers with primiparous parity, with 33 respondents (55%) followed by multiparous of 27 respondents (45%) and there was no group of mothers with grande multiparous parity. Parity or the number of children already born can also affect the ability of the mother's uterus to contract after delivery. In multiparous women, there is usually a decrease in the rate and ability of uterine contractions when compared to primiparous mothers. This can occur because the uterine muscles are often stretched can affect the elasticity of the uterine muscles, so the time needed for the recovery period is longer. [7]

The results also showed that 41 respondents (68.3%) of the total research respondents did two months full of breastfeeding. Many respondents breastfeed for two months but not fully as many as 19 people (31.7%). Riskesdas data in 2018 shows that the proportion of breastfeeding patterns at age 0-5 months in Indonesia is 37.3% of exclusive breastfeeding, 9.3% of partial breastfeeding, and 3.3% of predominantly breastfeeding.[9] The high percentage of exclusive breastfeeding can illustrate the increasing sense of care and awareness of mothers and their families about the importance of exclusive breastfeeding.[10] Exclusive breastfeeding is beneficial for the baby and the mother, where breastfeeding can help the mother's recovery process from pregnancy and childbirth by helping the uterus contractions due to the hormone oxytocin that is produced when the baby sucks the mother's nipple. In addition, breastfeeding is also an action to show and build affection between mother and baby to be comfortable.[11]

In this study, the distribution results of the duration of puerperal bleeding were

also obtained. The largest group was the group of respondents whose duration of puerperal bleeding was 2-4 weeks, as many as 42 respondents (70%). Followed by a group of respondents whose duration of puerperal bleeding was two weeks, with 11 respondents (28.3%), then the group of respondents whose duration of puerperal bleeding was six weeks were nine respondents (19.6%), the group of respondents whose duration of puerperal bleeding was four weeks and five weeks as many as five respondents (10.9%) and finally the group of respondents whose duration of puerperal bleeding was one week, namely two respondents (4.3%). Uterine contractions were deemed appropriate in this study because the fundal height measurements revealed a decrease in size, weight, and changes in the location of the uterus during the puerperium. Other than that, uterine contraction is also marked by a change in the color of the lochia and a decrease in the number of lochia until it finally stops.[12] The normal puerperium usually lasts six weeks after delivery. The duration of postpartum lochia can vary from person to person.[13]

In this study, data analysis was performed using the Mann-Whitney U test, and the results obtained were p-value = 0.211 ($p < 0.05$). From these results, it can be stated that the correlation between 2 months full of breastfeeding on early initiated breastfeeding group with puerperium bleeding was not significant. Ferdina Mayasari, Wulandari Meikawati, and Rahayu Astuti, in their 2015 study, stated that several other factors could also affect the duration of maternal postpartum bleeding, as seen from the rate of uterine involution. These factors are early mobilization, age, and parity, nutritional status.[14] According to research conducted by Cynthia M. Visness on 477 breastfeeding mothers in the Philippines, the median duration of lochia discharge was 27 days and did not vary according to age, sex, or birth weight of infants, frequency of breastfeeding. In addition, this study also stated that bleeding caused by the healing process after childbirth generally stops and then starts to return at least once during the puerperium. [15]

The insignificant relationship in this study was found because many other factors can influence the condition of the mother's uterus to be able to remove the remains of the placenta and decidua tissue affect the duration of puerperal bleeding, which in this study was not discussed.

CONCLUSION

Based on the research results that has been done, it is concluded that there was no significant correlation between 2 months full of breastfeeding on the early initiated breastfeeding group with puerperium bleeding.

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