BREASTFEEDING FREQUENCIES ASSOCIATED WITH UTERINE INVOLUTION

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Abstract. **Background :** Uterine Involution is a process of returning the uterus to conditions such as before pregnancy in women who have given birth. This process starts immediately after the placenta comes out due to contraction of the smooth muscles of the uterus. The uterus will become small in size like as before becoming pregnant that takes approximately six weeks. factors affect uterine involution of early mobilization or postpartum exercise, nutrition, parity, psychological, maternal age and breastfeeding. Breastfeeding is one of the factors that influence the process of uterine involution. The purpose of this study was to determine the effect of frequency of breastfeeding on uterine involution.
Methods : The research design used Cross sectional. Samples were taken using quota sampling as many as 50 postpartum women who gave birth at basic essential obstetric neonatal services in Bandung. Collecting data use primary and was analyzed used the correlate test.
Results : The test results showed a p-value of 0.004 (p <0.05), there was a significant effect between the frequency of breastfeeding infants with uterine involution.
Conclusion : The more frequency of breastfeeding will become uterine involution faster. The results of this study are expected to be a reference in motivating postpartum mothers to breastfeed their babies

Introduction

The postpartum period is six weeks from the time the baby is born until the organs return to their normal state before becoming pregnant. During the puerperium, internal and external genetalia will gradually return to the state before pregnancy. Genital changes of the genitals are called involution (Ambarwati, 2009). Uterine revolution is the process of the uterus returning to its size and condition before pregnancy (Reeder, 2011).

One indicator in the process of involution is the height of the uterine fundus. When the uterine fundus is above the normal level, this is a danger sign, it can occur in the womb, even if very much blood out will produce a shock, indeed becoming death. If the uterus does not occur involution process or involution failed , it is called subinvolution. Subinvolution can be caused by infection or placenta retained and advanced bleeding (Ambarwati, 2010).

The involution process will take place well whether the uterine contractions are strong, so that it must be taken to improve uterine contractions. Several factors affect uterine involution could be early mobilization or postpartum exercise, nutrition, parity, psychological aspect, maternal age and doing breastfeeding. Breastfeeding is one of the factors that influence the process of uterine involution. (Cuningham, 2013). Breastfeeding can stop bleeding and accelerate discharge after childbirth so that the uterus will return to normal as before. The factors that greatly affect the acceleration of uterine involution is by giving breast milk (Ambarwati, 2010).

Exposure of breast milk occurs due to psychological stimulation, maternal's eye reflex to the brain will produce oxytocin and make the uterus become harder to contract. Oxytocin makes uterus's muscle contract and retract so that it will suppress blood vessels resulting in reduced blood supply to the uterus which helps reduce bleeding.

Breast milk could be released with hormonal stimulation, breastfeeding and baby suction. Baby suction stimulation will form prolactin released by adenohipofise. Furthermore neurohipofise (posterior pituitary) will release oxytocin which flows through the bloodstream to the uterus, causing uterine contractions. (Sulistyawati, 2009).

World Health Organization recommend exclusive breastfeeding Exclusive breastfeeding means giving a baby only breast milk , no other food or drink, including water; in addition to breast milk (medicines and vitamin and minerals drops are permitted). On the other hand, partial breastfeeding includes other feeding methods in addition to breastfeeding (i.e. bottle, cup, lact-aid) regardless of content. (WHO, 2017).

Riskesdas (2018) The exclusive breastfeeding pattern in 0-5 months of infants in West Java is 35%, the figure is still below of the exclusive breastfeeding pattern in Indonesia as much as 37.3%. (Ministry of Health, 2018)

Methods

The research design used Cross sectional. Samples were taken using quota sampling as many as 50 postpartum women who gave birth at basic essential obstetric neonatal services (PONED) in Bandung. Collecting data use primary and then being analyzed by the correlate test.

Result

Overview of Breastfeeding Frequency and Uterine Involution

Tabel 1. Description of Breastfeeding Frequency at PONED in Bandung.

Variable	Mean	Median	Min	Maks	SD
Breastfeeding Frequency	10,7	10.00	6	16	2,25
uterine involution	7,70	8,00	5	11	1,85

Table 1 shows that the average frequency of breastfeeding was 10.7 times per day and the average uterine involution took place of 7.70 days. The result of this study is similar of a study conducted by Putri (2011) that there was a relationship between the frequency of breastfeeding and uterine involution. of 25 respondents, 18 respondents were fully breastfed (more than 12 times a day) 94.4% experienced normal involution, from 5 respondents breastfeeding less than 8 times a day and PASI 60% experiencing abnormal involution, and 2 respondents not breastfeeding only 100% experiencing abnormal involution.

Another study mentioned the same thing, that there was an influence between frequency of breastfeeding and uterine involution, of 32 respondents who had breastfeeding frequency <8 times a day, there were 18 respondents (56.3%) experiencing inappropriate uterine involution, while from 58 respondents who breastfeeding frequency ≥ 8 times a day there are 10 respondents (14.7%) experiencing inappropriate uterine involution. (Indrasari (2013).

Giving breast milk should be done as often as possible or not scheduled (on demand). Factors causing reduced frequency or problem of breastfeeding are less or wrong information from health provider, flat nipples, nipple pain or abrasions, swollen breasts, less breast milk's syndrome, working women, sick women, baby with confused nipples, premature baby, cleft baby and baby who need treatment (Ambarwati, 2010).
Many factors influence exclusive breastfeeding and early breastfeeding initiation such as lack of knowledge, problems with lactation, poor families and social support, social norms, shame, child care and health services, as well as policies and barriers which experienced by working women. (El-Houfey, 2017).

Women and babies can help each other so that breast milk production increases and the baby continues to provide effective suction. Health provider should provide counseling to women to breastfeed as often as possible at least 8 times a day to their baby exclusively for 6 months without any additional food. Many benefits are obtained by babies and women by giving breastfeed as often as possible, one of which is to accelerate the process of uterine involution. (Indrasari, 2015). The best breastfeeding is according to the baby's request (on demand) at least 8 times per day. The more baby sucking, the more milk released (Ambarwati, 2010). One of the factors that cause postpartum' subinvolution is the lack of breastfeeding frequency

The effect of frequency of breastfeeding on uterine

Table 2. The effect of breastfeeding frequency on uterine involtion At PONED in Bandung

		Frequency of Breasfeeding	Uterine Involution
Frequency of Breasfeeding	Pearson Correlation	1	-.403**
	Sig. (2-tailed)		.004
	N	50	50
Uterine Involution	Pearson Correlation	-.403**	1
	Sig. (2-tailed)	.004	
	N	50	50

The results of the correlation between the frequency of breastfeeding and uterine involution show the Pearson correlation coefficient of -0.403. The test results showed a p-value of 0.004 (p <0.05), there was a significant effect between the frequency of breastfeeding with uterine involution. It

means that the more frequency of breastfeeding will make uterine involution faster.

Breastfeeding can stop bleeding after childbirth by stimulating the emergence of uterine contractions, due to the baby sucks the maternal's nipple will stimulate the posterior pituitary so that oxytocin can be released which serves to increase contraction of smooth muscle around the breast milk gland alveoli so that breast milk can be released and stimulation of the smooth muscle of the uterus so that the uterus will quickly return to normal (Sulistyawati, 2009).

This is in accordance with the results of a study by Widyawati (2017) showing that there is a relationship between breastfeeding and uterine involution in postpartum women 0-7 days in the Tanjunganom Health Center in Nganjuk Regency in 2017 with p value = 0.001. In addition, the Indrasari study (2015) showed that there was a significant relationship between the frequency of breastfeeding to uterine involution in postpartum women in the Health Post of Rajabasa Raya Sub-District, Rajabasa Bandar Lampung District in 2013 (p value = 0,000).

Conclusion

This research was a significant effect between the frequency of breastfeeding with uterine involution. The more frequency of breastfeeding will make uterine involution faster.

Competing Interest

The authors of this paper have no competing interest to report.

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