

# The Effect Of Oxytocin Massage On Milk Production For Breastfeeding Mothers In The Working Area Of The Puskesmas Syamtalira Bayu North Aceh District

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## ABSTRACT

Breast milk production is greatly influenced by psychology, mothers who are always in a state of stress, sadness, lack of self-confidence and various forms of emotional tension will reduce the volume of breast milk and even breast milk production will stop altogether.. The aim of this research is to determine the effect of oxytocin massage on breast milk production in breastfeeding mothers Syamtalira Bayu Community Health Center Working Area, North Aceh Regency. The design of this research is analytical research using a cross sectional approach. The population in this study were all breastfeeding mothers who were in Syamtalira Bayu Health Center Working Area totaling 40 breastfeeding mothers. The sampling method in this research is to use the total population. Where the sample for this research is the entire population, totaling 40 respondents. The validity test in this research will be carried out in the Mongeudong Community Health Center Area with a total of 10 respondents, 30 questions with an r product moment value of 0.70. The research results showed that of the 28 breastfeeding mothers who did oxytocin massage, the majority of their breast milk production was smooth, namely 17 people (60.7%), while of the 12 breastfeeding mothers who did not do oxytocin massage, the majority of their breast milk production was not smooth, namely 9 people (75%). It is hoped that this will increase respondents' knowledge in efforts to increase breast milk production and provide information on the impact of failure in the breastfeeding process.

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## INTRODUCTION

Women are one of the creatures who have received a gift from God Almighty to be able to conceive, give birth and breastfeed. The nature given to women is characterized by the reproductive organs they have, namely the uterus and all its parts, for the growth and development of the fetus while in the womb, and the breasts to be able to breastfeed the child when it is born, meaning that all women have the potential to breastfeed their children, equal to their potential. to be able to conceive and give birth (Perinasia, 2010).

Maternal problems that arise during breastfeeding can start before delivery (antenatal period), in the early post partum period and in the late post partum period. Breastfeeding problems can also be caused by special circumstances. Apart from that, mothers often complain that their babies often cry or refuse to breastfeed. It is often interpreted as meaning that there is not enough breast milk or that the breast milk does not taste good, which often leads to the decision to stop breastfeeding (Maliha et al, 2011).

Breastfeeding gives children the best start in life. It is estimated that more than one million children die each year from diarrhea, respiratory illnesses and other infections because they are not breastfed adequately. There are many more children who suffer from illnesses that they would not need to suffer from if they were breastfed. Breastfeeding also helps protect the mother's health (Perinasia, 2007).

The World Health Organization (WHO) recommends that newborn babies receive exclusive breast milk (no supplements) for six months. This is because breast milk is the best natural nutrition for babies with the most appropriate nutritional content for optimal growth (Hegar, 2011). However, only 35.5% of babies aged less than 6 months in the world receive exclusive breast milk (WHO, 2011).

Achieving exclusive breastfeeding is influenced by several factors, including reduced breast milk production caused by hormones and the mother's perception that breast milk is not enough. Factors producing and releasing breast milk in the body are influenced by two hormones, namely prolactin and oxytocin. To overcome the problem of breast milk production caused by decreased stimulation of the hormone oxytocin, namely by breastfeeding early in the first hours because the more often the nipple is sucked by the baby's mouth, the more hormones are produced, so that more milk comes out (Maryuani, 2012)

The great benefits of breast milk are not balanced by an increase in breastfeeding behavior so that babies do not get breast milk well. Several factors are thought to be the cause of babies not getting breast milk well, one of which is the mother's knowledge, the mother's reluctance to breastfeed because of pain when breastfeeding, fatigue when breastfeeding, and the mother's concern about breast changes after breastfeeding. Socio-cultural factors, lack of family and environmental support in the breastfeeding process also greatly influence the breastfeeding process. The lack of health education regarding factors that can increase breast milk production also influences the knowledge of primiparous mothers which can cause a lack of breast milk volume (Budiharjo, 2003, and Lubis, 2010).

Massage is one solution to overcome irregularities in breast milk production. Massage is massaging along the spine (vertebrae) to the fifth-sixth rib bones and is an attempt to stimulate the hormones prolactin and oxytocin after giving birth (Yohmi et al, 2009). This massage functions to increase the hormone oxytocin which can calm the mother, so that breast milk comes out automatically. Research conducted by Eko (2011) shows that a combination of marmet techniques and oxytocin massage can increase breast milk production.

Massage or stimulation of the spine, neurotransmitters will stimulate the medulla oblongata directly sending a message to the hypothalamus in the posterior pituitary to release oxytocin, causing the breasts to release milk. Massage in the spinal area will also relax tension

and relieve stress and in this way the hormone oxytocin will be released and will help release breast milk, assisted by the baby sucking on the nipple immediately after the baby is born with a normal baby condition (Guyton, 2007).

Data from the 2017 Indonesian Demographic and Health Survey (SDKI) 8 shows that in general the breastfeeding rate for babies aged less than six months reached 52%. Apart from increasing by around 11% compared to similar research in 2012, this achievement meets the minimum target of 50% set in the last five year national development plan.

Based on research by Amin et al (2011) regarding the effectiveness of rolling (back) massage which has the same procedure as oxytocin massage on breast milk production in Caesarea Post Section mothers at the Palembang Muhammadiyah Hospital, the results showed that the proportion of smooth breastfeeding in the group that received the intervention was 93.5%. The mother's psychological condition can affect the production and release of breast milk. Derek (2005) said that mothers who are always in a state of anxiety, lack of self-confidence, feelings of pressure, fear, unsympathetic visitors and various forms of emotional tension, can result in the mother failing to breastfeed her baby because this condition can inhibit the release of the hormone oxytocin, thereby preventing its entry. breast milk into the breast vessels.

The mother's feelings of not being sure that she can give breast milk to her baby will cause a decrease in the hormone oxytocin so that breast milk cannot come out immediately after giving birth and finally the mother decides to give formula milk. Currently, non-pharmacological therapy to increase breast milk production exists but has not been widely implemented in all obstetric services. One non-pharmacological effort that can be done to stimulate the hormones prolactin and oxytocin in mothers after giving birth is by doing an oxytocin massage. This is in accordance with recommendations from the government for the use of the surrounding nature or "Back to Nature".

Based on the results of interviews and observations of 5 mothers after spontaneous delivery on day 0 in the Syamtalira Bayu Community Health Center working area, 3 people (60%) post partum mothers said they lacked self-confidence, were anxious and the baby was crying, refused to breastfeed because the breast milk had not come out, and the mother said The nipples were flat or inverted in 1 person (20%), and the mother said the nipples were sore in 1 person (20%). Postpartum mothers or their families do not know about efforts to facilitate breastfeeding. Efforts have been made to increase the production of breast milk in the Syamtalira Bayu Community Health Center Working Area, namely providing education about breast care, correct breastfeeding techniques, providing nutritious food, and encouraging breastfeeding as often as possible, but there has been no oxytocin massage for postpartum mothers. The aim of this research is to determine the effect of oxytocin massage on the quantity of breast milk in post partum mothers in the Syamtalira Bayu Community Health Center Working Area.

Based on the description above, researchers are interested in conducting research on "The Effect of Oxytocin Massage on Breast Milk Production in Breastfeeding Mothers in Syamtalira Bayu Community Health Center Working Area".

## METHOD

This research design is an analytical research with a cross sectional approach. The cross sectional design means that each research subject is only observed once and variables are measured at the same time. The population in this study were all breastfeeding mothers who were in Old Javanese Village, Lhokseumawe City totaling 40 breastfeeding mothers, the sampling method in this study was to use the total population. Where the sample for this research is the entire population of 40 respondents with criteria. The instrument in this research uses a questionnaire. Univariate analysis was carried out on each variable from the research results. This analysis only produces the distribution and presentation of each variable. The bivariate analysis used was the chi square technique using the SPSS version 20.0 program.

## RESULTS AND DISCUSSION

**Table 1** Frequency Distribution of Oxytocin Massage in Breastfeeding Mothers

No.	Oxytocin Massage	Frequency	%
1.	Yes	28	70
2.	No	12	30
	Amount	40	100

Based on table 1 above, it can be seen that the majority of breastfeeding mothers in Gampong Pante Sikumbang do oxytocin massage, namely 28 people (70%)

**Table 2** Frequency Distribution of Breast Milk Production for Breastfeeding Mothers

No.	Breast milk production	Frequency	%
1.	Fluent	20	50
2.	Not smooth	20	50
	Amount	40	100

Based on table 2 above, it can be seen that there are 20 breastfeeding mothers in Gampong Pante Sikumbang whose breast milk production is smooth (50%) and 20 breastfeeding mothers in Pante Sikumbang Village whose breast milk production is not smooth are 20 people (50%).

**Table 3** Cross Tabulation Frequency Distribution of the Effect of Oxytocin Massage on Mother's Breast Milk Production

No.	Oxytocin Massage	Breast milk production				F	%	p-value	A
		Fluent	%	Not smooth	%				
1.	Yes	17	60.7	11	39.3	28	100	0.084	0.05
2.	No	3	25.0	9	75.0	12	100		
	Amount	20	50	20	50	40	100		

Based on table 3 above, it can be seen that of the 28 breastfeeding mothers who did oxytocin massage, the majority of their breast milk production was smooth, namely 17 people (60.7%), while of the 12 breastfeeding mothers who did not do oxytocin massage, the majority of their breast milk production was not smooth, namely 9 people (75%) . The

statistical test results showed that the p-value was  $0.085 > 0.05$ , which means that  $H_a$  was rejected and  $H_o$  was accepted, that is, there was no effect of oxytocin massage on the breast milk production of breastfeeding mothers in the Syamtalira Bayu Community Health Center Working Area, North Aceh Regency.

Based on table 3 above, it can be seen that of the 28 breastfeeding mothers who did oxytocin massage, the majority of their breast milk production was smooth, namely 17 people (60.7%), while of the 12 breastfeeding mothers who did not do oxytocin massage, the majority of their breast milk production was not smooth, namely 9 people (75%) . The statistical test results showed that the p-value was  $0.084 > 0.05$ , which means that  $H_a$  was rejected and  $H_o$  was accepted, that is, there was no effect of oxytocin massage on the breast milk production of breastfeeding mothers in the Syamtalira Bayu Community Health Center Working Area, North Aceh Regency.

Based on the results of the research, the researchers assume that the breast milk production of breastfeeding mothers is not only influenced by oxytocin massage but there are many other factors that cause smooth breast milk production in breastfeeding mothers, such as nutritional factors or the food intake that the mother consumes while the mother is breastfeeding the baby. And this is in accordance with the theory which states that breast milk production is influenced by the food the mother eats, if the mother eats food regularly and has enough of the necessary nutrition it will be able to influence breast milk production, because the glands that make breast milk cannot work perfectly without enough food (Kristiyansari , 2009). This can be explained by the fact that the better nutritional intake a breastfeeding mother eats, the more it will affect her breast milk production. The results of this research are supported by the opinion of Jannah (2012) that balanced nutrition during breastfeeding is a very important need for breastfeeding mothers, which is closely related to breast milk production and is very necessary for the baby's growth and development. The results of this study are not in line with research by Eko (2011) which shows that a combination of marmet techniques and oxytocin massage can increase breast milk production.

This research is also not in accordance with Gyton's theory (2007) which states that massage or stimulation of the spine, neurotransmitters will stimulate the medulla oblongata directly sending a message to the hypothalamus in the posterior hypophysis to release oxytocin, causing the breasts to release milk. Massage in the spinal area will also relax tension and relieve stress and in this way the hormone oxytocin will be released and will help release breast milk, assisted by the baby sucking on the nipple immediately after the baby is born in a normal baby condition.

## CONCLUSION

Based on the results of research conducted in the Syamtalira Bayu Health Center Working Area, North Aceh Regency, the following results were obtained: Oxytocin massage for breastfeeding mothers is in the yes category. Breast milk production for breastfeeding mothers is in the same category, namely smooth and not smooth. There is no effect of

oxytocin massage on breast milk production of breastfeeding mothers and babies in the Syamtalira Bayu Community Health Center Working Area, North Aceh Regency.

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