

# Oxytocin Massage With Lavender Aromatherapy Oil To Increases The Flow Of Breast Milk

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## ABSTRACT

Ineffective breastfeeding is a condition where the mother and baby experience dissatisfaction or difficulty during the breastfeeding process. Breast milk can be effectively expelled from the breast by stimulating the oxytocin reflex. One way to stimulate the oxytocin reflex is to massage the mother with oxytocin. Oxytocin massage can be combined with lavender aromatherapy oil because the spinal massage and the aroma of lavender aromatherapy oil that you can feel through your sense of smell is an effort that can quickly increase the release of the hormone oxytocin. The aim of this study was to determine and analyze nursing care for post partum mothers with ineffective nursing problems by using treatment oxytocin massage with lavender aromatherapy oil. The design used in the study used qualitative methods. The participant of this study involved 3 participants who met the inclusion criteria. The instrument used in this study was an observation sheet for flow of breast milk from maternal and infant factors, and using operational procedure standart for oxytocin massage with lavender aromatherapy oil. The results showed that before being given the intervention, the third was not breastfeeding smoothly and after being given the intervention, the third participant was breastfeeding smoothly. The conclusion of this study is that oxytocin massage with lavender aromatherapy oil is can increases the flow breast milk.

**Keywords:** Aromatherapy lavender, Ineffective breastfeeding, Oxytocin massage, Post partum

## INTRODUCTION

Post partum or the postpartum period is the period when the baby is born and the placenta is separated from the uterus for up to six weeks afterward, until changes in the uterine organs, such as injuries and so on, recover during childbirth (Suherni, Widyasih, & Rahmawati, 2008). The six week period between the termination of labor and the return of the reproductive organs to their pre-pregnancy state is also called puerperium where puer means a child, and parere means returning to normal. ) internal reproductive organs (Reeder, Martin, & Koniak-Griffin, 2011).

Lactation is a part of the reproductive process to provide food to babies ideally and naturally and is the basic biology and psychology necessary for growth (Asih & Risneni, 2016). During the lactation process the mother will breastfeed her baby. Breastfeeding is a way to meet the best nutritional needs for babies. In breastfeeding, there is a way to breastfeed correctly, namely giving breast milk to the baby with the correct attachment and position of the mother and baby (Asih & Risneni, 2016).

Mother's milk (ASI) is the best living fluid that is really needed by babies. Breast milk contains various substances that are important for the growth and development of babies and according to their needs (Maritalia, 2012). The nutrients contained in breast milk are needed for the growth and development of intelligence babies. Apart from that, breast milk also contains anti-infective substances to prevent digestive tract infections, and contains immune substances that can make babies less likely to get sick (Jumiyati & Simbolon, 2019).

Newborn babies up to 6 months old if given breast milk without any additional supplements (except medication) and this can last until the child is 2 years old plus complementary feeding, which is properly referred to as exclusive breastfeeding (Anggraeny & Ariestiningsih, 2017). Exclusive breastfeeding from 0-6 months must be given because at that time the baby's nutritional needs can be met by the mother's breast milk, the baby is also not ready to digest food other than breast milk. During this period (0-6 months) is a period of leaps in brain growth so that exclusive breast milk is the best nutrition in terms of quality and quantity. If there is severe nutritional deficiency during this period, what will happen is a reduction in the number of brain cells by 15-20% (Riyanti, Astutiningrum, & Herniyatun, 2020).

National exclusive breastfeeding coverage in 2019 was 67.74%, this figure has reached the 2019 Strategic Plan target of 50% (Ministry of Health of the Republic of Indonesia, 2020). However, the breast milk coverage that babies received in Lampung Province in 2019 was 69.3%, and specifically the distribution of exclusive breastfeeding coverage according to Bandar Lampung Regency or City was 64.7%, while the expected target was 80%, meaning that exclusive breastfeeding coverage was The number of babies found in Lampung Province and especially in Bandar Lampung Regency or City is still below the expected target (Lampung Provincial Health Service, 2019). Based on the medical records of parturition books in the Palapa Community Health Center Work Area, especially at the Zubaedahsyah Midwife's House, from June 2021 to February 2022 there were 102 post-partum mothers with 52 post-partum mothers of their first child, and almost all post-partum mothers of their first child experienced problems. Ineffective breastfeeding is caused by breast milk not wanting to come out or milk production being less than smooth, meaning that 50% of post partum mothers experience this problem.

The production and release of breast milk is influenced by two hormones, namely the hormone prolactin and the hormone oxytocin. Prolactin influences the amount of breast milk production, while oxytocin influences the process of producing breast milk (Maritalia, 2012). To effectively remove breast milk from the breast, the oxytocin reflex must be stimulated. Without stimulation, there will be a lot of breast milk remaining in the mother's breast tissue (Asih & Risneni, 2016). One way to stimulate the oxytocin reflex is to give the mother an oxytocin massage. Oxytocin massage is massage carried out around the spine (pars thoracic vertebrae) so that oxytocin is stimulated to come out (Asih & Risneni, 2016). Oxytocin massage is a massage that husbands can do for their wives in the nape area, so that their wives can feel relaxed (Chomaria, 2020).

According to research by Wulan (2019), oxytocin massage can be combined with lavender aromatherapy oil and differences in average breast milk production have been obtained before and after the combination of oxytocin massage and lavender aromatherapy. The combination of oxytocin massage and lavender aromatherapy oil are two efforts to increase breast milk production because spinal massage and the fragrance of lavender aromatherapy oil which the mother can feel through her sense of smell are efforts that can quickly increase the release of the hormone oxytocin so that it can help the mother psychologically. , and makes mothers feel calm, does not feel post-partum stress, restores their self-confidence,

helps mothers have positive thoughts and feelings for their babies, increases breast milk production, facilitates breastfeeding and helps relieve post-partum mothers' fatigue (Wulan, 2019). When a mother feels satisfied, confident, she can give breast milk to her baby, thinking about her baby with love and other positive feelings can make the oxytocin reflex work. Apart from that, the sensation of holding, touching, kissing, looking at and hearing her baby cry can also make the oxytocin reflex works. When a mother has the desire to give breast milk to her baby and when the baby sucks on the mother's breast, oxytocin will start to work (Asih & Risneni, 2016).

Based on the phenomena and gaps above, researchers are interested in conducting further research to determine changes in the smoothness of breast milk production using the application of oxytocin massage with lavender aromatherapy oil in a study with the title "Nursing Care for Post Partum Mothers with Ineffective Breastfeeding Problems: Breast Milk Production Using the Application of Massage "Oxytocin with Lavender Aromatherapy Oil in the Palapa Community Health Center Work Area."

## **METHOD**

The design used in this research uses a qualitative method with a case study approach with the aim of providing an overview or description of the phenomenon studied from the participants. The subjects in this research were patients who experienced ineffective breastfeeding problems, they are three participants. The instrument used was observation sheet for flow of breast milk from maternal and infant factors, as well as using operational procedure standart for oxytocin massage with lavender aromatherapy oil.

## **RESULTS**

This research was carried out in the Palapa Community Health Center Work Area for about two mounts in April - Mei 2022. The researchers received 3 post partum mothers as participants. This is because the researchers selected the 3 post partum mothers selected as participants according to the inclusion criteria. Before applying oxytocin massage with lavender aromatherapy oil, all subjects will be given an initial measurement (pretest) using an observation sheet. The results of the initial measurements (pretest) can be seen in table 1 for the distribution of breast milk production from baby factors and from maternal factors as follows:

Table 1 Distribution of flow breast milk from baby factors & from maternal factors before applying oxytocin massage with lavender aromatherapy oil

No	Participants	Value of Flow Breast Milk from Baby Factors	Information	Value of Flow Breast Milk from Maternal Factors	Information
1	Mrs.NK	2	Not smooth	3	Not smooth
2	Mrs.Y	2	Not smooth	3	Not smooth
3	Mrs.NA	1	Not smooth	1	Not smooth

From the table above, it can be seen that before the application of oxytocin massage with lavender aromatherapy oil in the Palapa Community Health Center Work Area, it was found that flow breast milk for the 3 post partum mother participants was overall said to be not smooth with the observation value of flow breast milk from participant 1's baby factor (Mrs. NK) getting a score. 2 (baby defecates 2-5 times a day, and the average baby sleeps 2-3 hours after each feeding), participant 2 (Mrs. the baby sleeps 2-3 hours after each feeding), and participant 3 (Mrs NA) got a score of 1 (baby defecates 2-5 times a day).

Meanwhile, the observation value of flow breast milk from participant 1's mother factor (Mrs. 2 (Mrs. the baby is without a schedule (according to the baby's needs). These results are said to be not smooth because the value of flow breast milk from the baby factor corresponds to the indicator <4 items and the observed value of breast milk production from the mother factor answers YES <5. After applying oxytocin massage with lavender aromatherapy oil for 3 consecutive days, all subjects will be given a final measurement (posttest) using an observation sheet for flow breast milk from baby factors and an observation sheet from maternal factors. The results of the final measurement (posttest) can be seen in table 2 for the distribution of flow breast milk from baby factors and from maternal factors as follows:

Table 2 Distribution of flow breast milk from baby factors & from maternal factors after applying oxytocin massage with lavender aromatherapy oil

No	Participants	Value of Flow Breast Milk from Baby Factors	Information	Value of Flow Breast Milk from Maternal Factors	Information
1	Mrs.NK	5	Smooth	9	Smooth
2	Mrs.Y	5	Smooth	9	Smooth
3	Mrs.NA	6	Smooth	8	Smooth

From the table above, it can be seen that after applying oxytocin massage with lavender aromatherapy oil in the Palapa Health Center Work Area, it was found that breast milk production for the 3 post partum mother participants was said to be smooth overall with the observation value of flow breast milk from first participant (Mrs.NK) for baby factor getting a score of 5 (Baby's urination is at least 6-8 times a day, the characteristics of the urine are clear yellow, the baby's bowel movements are 2-5 times a day, the baby's average sleep time is 2-3 hours after each feeding, the frequency of the baby's breastfeeding is 8-12 times).

The second Participant (Mrs. Ny. Y) received a score of 5 (The baby's urination is at least 6-8 times a day, the characteristics of the urine are clear yellow, the baby's bowel movement is 2-5 times a day, the baby's average sleep time is 2-3 hours after each feeding, the baby's frequency of breastfeeding is 8-12 times). Thrid Participant (Mrs. NA) received a score of 6 (baby's bowel movements at least 6-8 times a day, characteristics of clear yellow urine, baby's bowel movements 2-5 times a day, characteristics of golden yellow bowel movements, average baby's sleep time is 2-3 hours every times after breastfeeding, the baby's frequency of breastfeeding is 8-12 times).

Meanwhile, the observation value of flow breast milk from the first participant from mother factor (the areola is clean, not scratched, the mother breastfeeds the baby without a schedule (according to the baby's needs), the mother's breasts appear empty after the baby has fed until he is full and falls asleep, the baby appears to be sucking hard with a slow rhythm).

The second Participant (Mrs. Y) got a score of 9 (the mother's breasts are tense, the mother looks relaxed, the letdown reflex works well, the frequency of breastfeeding >8 times a day, the mother uses both breasts alternately, the condition of the nipples and areola is clean, no blisters, the mother breastfeeds her baby without a schedule (according to the baby's needs), breast the mother looks empty after the baby has breastfed until she is full and falls asleep, the baby seems to suck hard with a slow rhythm).

The thrid Participant (Mrs NA) received a score of 8 (mother's breasts are tense, mother looks relaxed, letdown reflex works well, frequency of breastfeeding >8 times a day, mother uses both breasts alternately, mother breastfeeds her baby without a schedule (according to the baby's needs), the mother's breasts appear empty after the baby has fed until he is full and falls asleep, the baby appears to be sucking hard with a slow rhythm). These results are said to be smooth because the value of breast milk production from the baby factor corresponds to

the indicator  $\geq 4$  items and the observation value of flow breast milk from the mother factor answers YES  $\geq 5$ .

## DISCUSSION

Based on the age characteristics of the participants, the research results obtained were that participants 1 and 2 were 30 years old and participant 3 was 19 years old, meaning that the majority of participants were 30 years old. These results are in line with research by Pamelina (2021) which states that smooth lactation is influenced by the mother's age, the optimal age for producing more breast milk is fertile age, namely under 35 years of age compared to older ages.

Based on the educational characteristics of the participants, the results obtained by all participants consisted of high school graduates with a percentage of 100%. According to research by Asiyah and Wigati (2015), breast milk production cannot be seen from education, but correct and received information about the breastfeeding process will determine the success of the breastfeeding process.

Based on the characteristics of the mother's work, the results obtained were that all participants did not work or were only housewives with a percentage of 100%. These results are in line with research by Indrayani (2020) which stated that as many as 100% of the participants did not work and were only housewives, so that they could have more full contact with their babies, so that as housewives the time for breastfeeding would increase and greatly affect the smooth flow of breastfeeding.

The difference in smooth breast milk production can be seen from before and after post partum mothers are given oxytocin massage with lavender aromatherapy oil by observing breast milk production from the baby. In this baby factor, the aspect that is assessed is the baby's frequency of urination, where if the baby has sufficient breast milk production then the baby will urinate at least 6 times in 24 hours, the color of the urine is clear yellow, if there is enough breast milk the baby will sleep/calm for 2 -3 hours. The intake that the baby gets will affect the elimination pattern. Babies who drink breast milk generally have a bowel movement pattern of two to five times in 24 hours, the stool produced is golden yellow. If the baby breastfeeds frequently, the baby will defecate more often (Budiati, 2009).

The results obtained in this study were through observation of breast milk production from baby factors, namely: in the measurements before being given the application or pretest, there were 0 people whose breast milk production was said to be smooth because all participants had breast milk production values less than the predetermined indicators. Meanwhile, after being given the application or posttest, there were 3 people whose breast milk production was said to be smooth because all participants got breast milk production values in accordance with the indicators that had been determined.

Differences in the smoothness of breast milk production can also be seen from before and after post partum mothers are given oxytocin massage with lavender aromatherapy oil through observing breast milk production from maternal factors. In this maternal factor, the aspect that is assessed is through breast tension, the let down reflex works well, this is because it can indicate the work of the hormone oxytocin which causes the let down reflex to also work well. One of the reasons why the let down reflex works well is because there is stimulation from the baby and the mother who relaxes, one way is by stimulation through oxytocin massage (Budiati, 2009).

According to Budiati (2009) states that the work of the oxytocin hormone is also influenced by the baby's sucking, the oxytocin hormone will be increasingly stimulated if the baby frequently breastfeeds. In general, breastfeeding or expressing breast milk can be done eight times in 24 hours to maintain high milk production in the early days of breastfeeding, especially the first four months. Newborn babies breastfeed on average 10-12 times in 24 hours, or sometimes more than 18 times. Breastfeeding whenever the baby asks (meaning more than average) is the best way to keep breast milk production high and the baby stays full. Another factor that also influences the work of the oxytocin hormone is the mother's psychological condition, where the mother's psychological condition, such as stress and the condition of the newborn who is too weak and sleepy, thereby reducing the sucking reflex can affect the lactogenesis cycle in breastfeeding mothers.

The results obtained in this study were through observation of breast milk production from maternal factors, namely: in the measurements before the application or pretest was given, there were 0 people whose breast milk production was said to be smooth because all participants had breast milk production values less than the predetermined indicators. Meanwhile, after being given the application or posttest, there were 3 people whose breast



milk production was said to be smooth because all participants got breast milk production values in accordance with the indicators that had been determined.

The current indicator has been determined if the baby's breast milk production value corresponds to the indicator  $\geq 4$  items. These items include the baby urinating at least 6-8 times a day, the characteristics of clear yellow urination, defecating 2-5 times a day, the characteristics of golden yellow defecation, the average baby's sleep time is 2-3 hours after each feeding, and the baby's frequency of breastfeeding is 8 -12 times. Meanwhile, the current indicator has been determined if the mother's breast milk production value is  $\geq 5$ . The answer that must be answered YES is that the mother's breasts are tense, the mother looks relaxed, the let down reflex works well, the frequency of breastfeeding is  $>8$  times a day, the mother uses both breasts alternately, the condition of the nipples and areola is clean, no blisters, the mother breastfeeds her baby without schedule (according to the baby's needs), the mother is seen expressing her breasts because they are full, the mother's breasts appear empty after the baby has fed until she is full and falls asleep, and the baby appears to be sucking hard with a slow rhythm.

Based on the results of the research that has been carried out, it is known that breast milk production before and after applying oxytocin massage with lavender aromatherapy oil has significant changes seen from the value of breast milk production which is in accordance with the predetermined indicators, namely from the indicator of not being smooth to being smooth.

The combination of oxytocin massage with lavender aromatherapy oil are two efforts to increase breast milk production because spinal massage and the fragrance of lavender aromatherapy oil which the mother can feel through her sense of smell are efforts that can quickly increase the release of the hormone oxytocin so that it can help the mother psychologically. , and makes mothers feel calm, does not feel post-partum stress, restores their self-confidence, helps mothers have positive thoughts and feelings for their babies, increases breast milk production, facilitates breastfeeding and helps relieve post-partum mothers' fatigue (Wulan, 2019).

## CONCLUSION

Based on the results of the research and discussion, several conclusions were drawn as follows:

Before implementing oxytocin massage with lavender aromatherapy oil, it was found that flow breast milk for all participants was overall said to be not smooth, both from baby and mother factors. These results are said to be not smooth because the value of flow breast milk from the baby factor corresponds to the indicator  $<4$  items and the observed value of flow breast milk from the mother factor answers YES  $<5$ .

After applying oxytocin massage with lavender aromatherapy oil, it was found that flow breast milk production for all participants was said to be smooth, both from the baby and from the mother. These results are said to be smooth because the value of flow breast milk from the baby factor corresponds to the indicator  $\geq 4$  items and the observation value of flow breast milk from the mother factor answers YES  $\geq 5$ .

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