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# Effectiveness of Oxytocin and Marmet Massage on Breast Milk Expenditure In Post Section Saecaria Mothers

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ABSTRACT

**Introduction:** Problems with early breastfeeding can occur in mothers who experience childbirth through Sectio Caesaria. This can have a negative impact on the baby's life. Mothers with Sectio Caesaria will have difficulty initiating early breastfeeding due to rooming-in factors, the condition of the incision in the mother's abdomen, weakness due to the influence of the anesthesia given previously, therefore patients with Sectio Caesaria surgery can only successfully breastfeed after a few hours after giving birth.
**Methods**: This research is a pre post test design. The sampling technique used is simple random sampling. The number of samples is 30 pregnant women post Sectio Caesarea.
**Results:** All 30 respondents after oxytocin and marmet massage experienced an increase of breast milk. Expenditure increase in mean by 6,44.
**Conclusion**: There is an effect of oxytocin and marmet massage on the speed of breast milk expenditure (p<0,05)

Keyword : Oxytocin, marmet, massage, sectio caesarea, breast milk expenditure

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## Introduction

Neonates, the period of early life outside the womb up to 28 days is the age group that has the highest risk of health problems. Coverage of the First Neonatal Visit (KN1) is an indicator that reflects health efforts made to reduce the risk of death in the neonatal period, which is 6-48 hours after birth, one of which is exclusive breastfeeding (Ministry of Health, 2018).

The results of Mapping the Infant Mortality Rate per 1,000 live births in Central Java Province in 2017 reached 8.93 per 1000 live births (jatengprov.go.id, 2018), while in the city of Magelang the latest data in

2016 reached 10.66 per 1000 live births (http http://data.magelangkota.go.id/). In order to reduce child morbidity and mortality, the World Health Organization (WHO) recommends that children should get exclusive breast milk (ASI) at the age of 0-6 months (WHO, 2020). The same is also recommended by the United Nations Children's Fund / UNICEF (UNICEF, 2018). According to the Indonesian Demographic and Health Survey (IDHS, 2017, p, 201) only half (52%) of children under 6 months are exclusively breastfed. The median duration of exclusive breastfeeding was 3 months.

Problems with early breastfeeding can occur in mothers who experience childbirth through Sectio Caesaria (SC) (Dewey et al, 2003; Rowey-Muray & Fisher, 2002). This can have a negative impact on the baby's life. Mothers with cesarean will have difficulty initiating early breastfeeding due to rooming-in factors, the condition of the incision in the mother's abdomen, weakness due to the influence of the anesthesia given previously, therefore patients with cesarean surgery can only successfully breastfeed after a few hours after giving birth (Roesli, 2008 ; Masadah & Rusmini, 2015).

Mothers undergoing cesarean section under anesthesia may not be able to breastfeed their baby intensely, because the mother has to be moved to the Recovery Room. Although currently the implementation of early breastfeeding initiation (IMD) can also be carried out in the operating room, not all hospitals have the same policy. In addition, the feeling of the mother who is not sure that she can give breast milk to her baby because her condition will cause a decrease in oxytocin so that milk cannot come out immediately after giving birth and finally the mother decides to give formula milk (Masadah & Rusmini, 2015)

The inhibiting factor in breastfeeding is the production of breast milk itself. Insufficient and slow milk production can cause mothers to not give enough milk to their babies. In addition to the hormone prolactin, lactation also depends on the hormone oxytocin, which is released from the posterior pituitary in response to nipple sucking. Oxytocin affects the myoepithelial cells that surround the mammary alveoli so that the alveoli contract and secrete milk that has been secreted by the mammary glands, this oxytocin reflex is influenced by the mother's spirit. If there is a feeling of anxiety, stress and doubt that occurs, then the release of breast milk can be hampered (Kodrat cit Masadah & Rusmini, 2015).

## Methods

This research is a pre post test design. The population in this study were patients with cesarean delivery in Harapan Hospital. The

sampling technique used is simple random sampling. The number of samples is 30.

**Result and Discussion.**

Table 1. Pre-test and post-test scores

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| pre_test_m | 30 | 2 | 4 | 2.63 | .669 |
| post_test_m | 30 | 8 | 10 | 9.07 | .944 |
| Valid N | 30 | | | | |

Table 2. Test Results Wilcoxon test

| | Pijat Oksitosin dan Marmet |
|---|---|
| Z | -4.868[a] |
| Asymp. Sig. (2-tailed) | .000 |

The result showed that from 30 respondents before and after oxytocin and marmet massage experienced an increase in the adequacy and speed of breast milk expenditure. The mean difference before and after oxytocin and marmet massage was 6.44. The results of the Wilcoxon test shown p-value = 0.000. These results indicate that the administration of marmet and oxytocin techniques affect the production of postpartum mother's milk which can be achieved by all respondents. Oxytocin massage is a massage along the spine (vertebrae) to the fifth - sixth costae bone and is an attempt to stimulate the hormones prolactin and oxytocin after childbirth (Biancuzzo, 2003; Yohmi & Roesli, 2009). This massage serves to increase the hormone oxytocin which can calm the mother, so that milk will automatically come out.

The Marmet technique developed massage and stimulation methods to help the milk ejection reflex. The success of this technique is the combination of massage and milk ejection methods that help the milk ejection reflex (milk ejection reflex) so that breastfeeding mothers who previously were only able to express little or no milk get very good results.

Bowles (2011) states that for the production of breast milk and smooth milk expenditure, stimulation of the breast muscles is needed so that the breast glands work more effectively, so that the muscles will contract better and good contractions are needed in the lactation process. Stimulation of the breast muscles can be done by massage or breast massage, one of which is by giving this marmet technique. Based on this study, it was found that all respondents received sufficient milk production. This can be caused by giving stimulation to the breast

muscles to work more effectively through the provision of marmet techniques that can stimulate the let-down reflex that triggers the release of breast milk. So by doing the marmet technique on post partum mothers, it can help increase the adequacy of breast milk production in post partum mothers.

Manipulation massage can accelerate milk production by how to stimulate hormone secretion. Oxytocin massage is the act of doing massage in the area back in the spinal area using both thumbs in a circular motion (movement love). This massage can be done twice a day a day with a duration of 3-5 according to this massage will help overcome problems during breastfeeding namely breast milk that does not come out (Pumama, 2013)

Breastproducing milk begins when the baby starts suckling on the nipple and the result of stimulation physical activity causes impulses in nerve endings that then sent to the hypothalamus in the brain which alternately tells the pituitary gland to brain to produce the hormone oxytocin and prolactin. Prolactin causes milk produced and oxytocin causes muscle fibers to that surrounds the alveolar glands shrivel up like on the uterine muscles. When the muscle fibers around alveolar glands constrict causing milk out which is called flow, this event can be cause sensation in the breast and squirt milk from the nipple. Hormone oxytocin will come out through stimulation to the nipple milk by sucking the baby's mouth or through massage on the spine of the baby's mother, by doing massage on the mother's spine will feel calm, relax, increase the pain threshold and love the baby, so that the hormone oxytocin comes out and breast milk comes out quickly (Astutik, 2015).

**Conclusion and Suggestions.**

Oxytocin and marmet massage are effective to increase the speed of milk breast milk expenditure. This intervention can be given to post section saecaria pregnant women

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