

# Literature Review The Effect of Oxytocin Massage on Breastmilk Production on Postpartum Mothers

Eka Priyanti<sup>1</sup>, Heni Setyowati<sup>2</sup>  
<sup>1,2</sup>Universitas Ngudi Waluyo

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## Abstract

Various obstacles such as the lack of support from the community, the lack of in-depth communication between mother and baby or bonding attachments, the independent coral effect regarding the control of formula milk or the ability to provide breast milk, and the introduction of breast milk substitutes since the mother's knowledge are low, and health workers who are less about breastfeeding, worry, and conflict experienced by mothers, decrease believes in themselves in breastfeeding, low baby weight, and the mother is malnourished, this is due to the less influence of the oxytocin hormone due to the lack of stimulation of the baby's sucking to active the work of the oxytocin hormone. Efforts to stimulate the oxytocin hormone and prolactin hormone by doing oxytocin massage so that milk production can flow smoothly and increase. To determine the effect of oxytocin massage on breast milk production in postpartum mothers. Method: Study literature review by taking data from research articles and Google Scholar, ResearchGate, Pubmed, and DOAJ according to the topic with the independent variable oxytocin massage and the dependent variable milk production, with the keywords Oxytocin Massage, Breast milk Production, Postpartum Mothers the selected 7 articles for review. Result: The 7 research articles had a significant effect on oxytocin massage on breast milk production in postpartum mothers. Oxytocin massage is best done on the first to the third day in the morning and evening. In the afternoon, 2 hours before breastfeeding with a duration of 15-30 minutes ith oxytocin massage Standart Operational Procedure can be done by family, healthy workers, or husband. The result of the literature review can be useful for the development of science and be used as a scienced reference in providing non-pharmacological services in the postpartum period, especially for those who have problems with substandard milk production.

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## Introduction

Formation of healthy newborns need to get proper care optimally since the baby was born, one of which is the ideal food. A new baby being born does not require

any other intake other than breast milk from the mother. But on, In fact, exclusive breastfeeding is not as easy as imagined. Various Obstacles can arise in an effort to provide exclusive

Corresponding author:

Eka Priyanti

ekapeyereal@gmail.com

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Universitas Ngudi Waluyo

breastfeeding for the first six months of the baby's life. Breastfeeding is a natural process for maintaining and continuing the survival of their child. Female organs are the main source of life for producing breast milk. Breast milk is the baby's main food source, especially in the month's first life. Effective breastfeeding is a practice appropriate and in accordance with the physiological development of the baby during the postnatal period and in the first year of life. Knowledge and experience of how to effectively breastfeed are some of the factors that cause failure in breastfeeding (Astutik, 2014).

According to data from the World Health Organization (WHO) and UNICEF, breastfeeding coverage exclusively for infants under 6 months is 41% and is targeted to reach 70% in 2030 (2018 in Global Breastfeeding Scorecard, 2018). Breastfeeding exclusively for 6 months and continued until the age of 2 years in addition to giving Complementary foods for breast milk (MP ASI) are proven to be one of the effective interventions that can reduce the Infant Mortality Rate (IMR). The mother recommended Breastfeeding your baby in the first hour after delivery and continuing up to the baby's first six months. When the baby is 6 months old, he can continue to breastfeed up to 2 years of age or older and provide complementary foods (WHO, 2017). There are a number of known triggers for breastfeeding failure from various analyzes, such as the lack of community support, the lack of depth between mother and baby or bonding attachment, free social effects regarding assistance with formula milk or stopping breastfeeding, and introduction of breast milk substitutes from an early age, knowledge of mothers and health workers less about breastfeeding, the worries, and conflicts experienced by the mother, lack of self-confidence in breastfeeding, low baby weight, and mothers are malnourished (Juanita, 2016).

Many mothers give formula milk to babies to meet the nutritional needs of the baby. This formula milk too assists mothers in providing substitute feeding when mother's milk is not smooth. For a mother Formula, milk is very practical and easy to get. UNICEF confirms that formula-fed babies are more likely to be malnourished in the first month of first birth and the probability of a formula-fed baby occurring malnutrition is 25 times higher than that of babies who are breastfed by their mothers exclusive (Roesli, 2013).

Milk production can be accelerated by non-pharmacological measures, namely through: oxytocin massage which can be done by massaging the area around the back (vertebra pars thoracic) to stimulate the release of breast milk, so the mother will feel satisfied, happy, confident because they can give breast milk to their babies, think about the baby with love and other positive feelings will make the oxytocin reflex work (Asih & Risneni, 2016). Successful breastfeeding mothers need support from husbands and family roles also help towards success in providing ASI (Khasanah, 2011). The process of expulsion of breast milk is also influenced by the letdown reflex. ie sucking on the nipple stimulates the glands in the brain to produce hormones oxytocin, which can stimulate the walls of the milk ducts so that milk can flow smoothly (Khasanah, 2011). Furthermore, the hormone oxytocin will enter the mother's flow and stimulate the muscle cells around the alveoli and contract to make breast milk that has been collected in it so that it will flow into the ducts (Asih & Risneni, 2016).

Oxytocin massage for nursing mothers serves to stimulate the hormone oxytocin in order to facilitate and increase the production of mother's milk. Related research results from Helmy Apreliasari, Risnawati (2019) about the effect of oxytocin massage on increase in breast milk production in Aura Homecare Salatiga City September 2019, that This



study shows the results of further statistical tests using the Wilcoxon Signed Ranks The test obtained p-value = 0.035 ( $p < 0.05$ ) which means that there is a massage effect oxytocin on breast milk production. This is in accordance with the theory which explains that Oxytocin massage greatly affects milk production due to the physiological effects of massage Oxytocin stimulates the anterior and posterior pituitary to secrete hormones oxytocin.

Based on the description above, the purpose of this scientific article is to know "Effect of Oxytocin Massage on Breast Milk Production in Postpartum Mothers".

### Method

This type of study is a metadata analysis using a literature review (literature review) which explores the benefits of oxytocin massage in order to increase breast milk production (Fanani, 2014). The literature review is a secondary study originating from literature review studies known in medical research. Search online namely: Google Scholar, ResearchGate, Pubmed, Web of Science, and DOAJ (Directory of Open Access Journals). Articles or journals that meet the criteria inclusions and exclusions were taken for further analysis. National journal inclusion criteria and international, journals published in 2015 to 2021, can be accessed online full text, accredited by ISSN, related to the research variable, namely the effect of massage oxytocin on breast milk production. Exclusion criteria beyond the scope of inclusion criteria.

Found as many as 815 articles according to topics, both national and international. The search results of the articles obtained are then checked duplication and then at the screening stage from 2015-2021 found as many as 727 duplicate/same articles so that they were removed and the remaining 88 research articles were data has been filtered or selected. Then the researcher did screening based on titles adapted to themes and variables, as many

as 33 articles were excluded because they did not match the theme and the remaining 55 articles. Then The researcher selects based on the abstract (in the abstract there are no results or results) discussion related to the variables studied) as many as 10 articles were excluded, and the remaining 23 articles. Researchers checked the completeness, the feasibility test phase 23 articles in full text/complete starting from the title, abstract, background, method, results, discussion, and bibliography obtained as many as 7 articles that can be used and fulfill the completeness, which is appropriate to have the ISSN indexed by SINTA and the Web Of Science with consideration of meeting the inclusion criteria that are eligible for further analyzed. While the remaining 16 articles did not meet.



## RESULTS AND DISCUSSION

### A. Relevance of Method

	Article 1	Article 2	Article 3	Article 4	Article 5	Article 6	Article 7
Author/ Title	Ridawati Sulaeman, Putu Lina, Masada, Dewi Purnamawati The Effect of Oxytocin Massage On Breastmilk Production Of Postpartum	Kurniati Devi Purnamasari, Yudita Hindiarti Oxytocin Massage Method, One Effort Increase Breastmilk Production Of Postpartum	Heni Setyowati, Ari Andayani, Widayati Difference Breastfeeding On Postpartum Mother After Giving Oxytocin Massage	Kholistin, Zainal Munir, Lina Yulia Astutik The Oxytocin Massage On Breastmilk Production Of Postpartum Primipara In RSIA Srikandi IBI	Fitri Nurhayati The Effect Of Oxytocin Massage On Breastmilk Production On The Of Postpartum Mothers 10 Day In The Work Area BPM Hj. Umamah, And. Keb Sumedang Regency March- May	Devi Azriani, Sri Handayani The Effect of Oxytocin Massage on Breast Milk Production	Siti Farida, Etik Sulistiyorini, Radettya Bella Retnaning Pangestu Oxytocin Massage Increase Milk Production During Breastfeeding
Method	Quasi Eksperiment	Quasi Eksperiment	Quasi Eksperiment	Pre-Eksperiment	Quasi Eksperiment	Quasi Eksperiment (Non experiment random)	Pre-experimental (Pre-Design Experimental)
Design	One group pre and post-test design.	One group pre and post-test design.	Posts only design control group.	The static group comparison: randomized control group only design. Checklist sheet	One group pre and post-test design.	Posts only design control group.	One Group Pre and Post Test Desain.
Instruments	Checklist sheet	Questionnaire ceklist	Digital scale	Checklist sheet	Checklist sheet.	Checklist sheet and scale	Spiel scale shift State and Trait Anxiety



Result	<p>Results Based on research that was performed at 30 respondents show that statistical test results use Wilcoxon Match Pairs Test showing enhancement milk production 15.50 times bigger than not intervention is carried out oxytocin massage with average value average milk production 5.37 times bigger compared to average before intervention is carried out with average 0.97. Test results statistics use Wilcoxon Match Pairs Test obtained p-value = 0.000 or <math>p &lt; = 0.05</math> the means <math>H_0</math> is rejected <math>H_1</math> which means there is the</p>	<p>The result of the statistical test obtained p-value=0.000 (p-value 0.05) which means there significant influence between oxytocin massage in the group intervention against mother's milk production postpartum. Based on the results research obtained the result that giving oxytocin massage to the intervention group significantly influences a significant increase in breastmilk production from production quantity of breast milk, baby weight, breastfeeding frequency, and frequency of urination. Giving massage oxytocin is applied to the mother during postpartum.</p>	<p>There is a difference Significant milk production between mother post that party given oxytocin massage and not given oxytocin massage in the working area Public health center Ambarawa, this thing proven Analysis obtained generally breastmilk production on postpartum mother's that doesn't get oxytocin massage is 1,267 ml, while breastmilk production on postpartum of mother's get massage oxytocin is 1,933 ml.</p>	<p>Based on the results of the study that bivariate analysis by use statistic test Wilcoxon known of 16 respondents the one before given intervention oxytocin massage frequency average feed 5.75 times in one day and usually frequency baby as much as 4.06 times in one day, and after given intervention oxytocin massage frequency average feed 7.94 times within 24 hours, and average frequency baby pee 6.31 times a day. increase in average</p>	<p>The results of the study of 20 postpartum mothers obtained a value of 0.000 <math>&lt; (0.05)</math> so that there was an oxytocin massage effect on the production of breast milk in the BPM Hj Work Area Umamah, AMD. Keb. The results of this study are recommended for breastfeeding mothers to be able to massage oxytocin, to influence breast milk production.</p>	<p>newborn baby weight Results of the study indicated that there was an effect of oxytocin massage on a baby's weight and breast milk production with a p-value of 0.001. mean statistically value <math>p &lt; 0.039</math> (<math>&lt; 0.05</math>). Based on the conclusion, it was advisable that the oxytocin massage can be used in postpartum care.</p>	<p>Inventory (STAI) and Questionnaire checklist Wilcoxon Test, resulting (2-tailed) show value 0.005 (p-value <math>&lt; 0.05</math>) so that it is obtained the result that <math>H_0</math> is rejected. <math>H_a</math> accepted, it means there is the insignificant difference before and after oxytocin massage increase breastmilk production. Oxytocin massage can effectively improve breast milk production with an average yield of - 2,840.</p>
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influence that  
significant  
massage Oxytocin  
in Mother  
PostPartum  
Primipara.

frequency  
average  
breastfeeding  
after given  
intervention  
oxytocin massage  
2.19 times later  
increase in  
average  
frequency  
average 2.25  
times a day.  
Results statistic  
test Wilcoxon get  
the value of Z  
breastfeeding  
frequency of -  
3.573a, frequency  
p-value  
breastfeeding by  
0.000 if 5%,  
frequency Z value  
baby pee of -  
3.547a, and p  
Nilai value  
frequency of  
urination baby as  
big as 5% means p  
<value 0.000.



The assumptions seen from the seven articles above, 5 of them use the method quasi-experiment, namely the first, second, third, fifth, The sixth and second articles used a pre-experimental method, namely articles fourth and seventh. The best research methods are found in articles 1, 2, 3, 5, 6 in the form of a representative experimental method, namely Quasy Experiment, this method is better than the Pre-experimental design. While articles 4 and 7 use the pre-experimental method is also called a weak experiment because there is no equalization of characteristics (random) and there is no control variable (Rukmaningsih, et al, 2020). According to Sugiyono, (2005) quasi-experimental (quasi-experiment) is research that is close to a real experiment. This study aims to directly examine the effect of a variable on other variables and test the hypothesis of a causal relationship. Design The experiment has an experimental class and a control class in the study. In this design, both the control group and the experimental group were compared.

The assumption is seen from the seven articles above, while the best design is 4th article using Statistical Group Comparison, Randomized Control Trial is the presence of a control or comparison group, there is the experimenter received treatment (X) followed by a second measurement or observation (O2), then the results of the observations are controlled or compared with the results in the control group that did not receive the intervention. While articles 1, 2, 5, 6 used a one-group pretest-posttest design wherein the design In this study, a group was given an intervention, a pretest was carried out before being given treatment. Thus the results of the treatment can be known more accurately because it can compare with the situation before being given treatment. To examine the relationship between two or more variables, namely the independent and dependent variables. The independent variable in this study is Oxytocin Massage and the dependent variable is

breast milk production but has the disadvantage that there is no guarantee that these changes occur in the dependent variable due to the intervention. While the 1st and 3rd articles use the posttest only design in this group design the treatment has been given an intervention (X), then an observation or posttest is performed (O2), as long as there is no control group the results of O2 are impossible to compare with others. Observation results only provide descriptive information. The weakness in this design is that there is no control group and validity interval (Sugiyono, 2005).

Instruments used in checking improvement indicators The best milk production in the seven research articles above is in article 6th, which is to use observation sheets and baby weight scales to assess indicators of success indicators of increased milk production. In line with Arikunto's research, (2002) states that an instrument is a tool or facility used in the research by using a method. The usefulness of this observation sheet instrument is to make it easier in research and the results are better, in the sense of being more accurate, complete, and systematic so that easy to manage. Direct observation of data about the object is recorded immediately and not based on someone's memory. Allow Simultaneous recording assisted by observers or other tools. Weight scales have been designed and intended with such a concept that only measures the baby's weight (KBBI, 2011). While articles 1, 2, 4 use a checklist questionnaire sheet, namely the tang data collection technique This is done by giving a set of questions or a written statement to the respondent to answer. The advantages can be standardized so that all respondents can be asked the same question, the weakness of this instrument namely respondents are often not careful in answering questions (Sugiyono, in Suis 2010). The 3rd article uses a digital scale, which is a tool to measure something's weight or





substance from large to small. Digital scale measurement results will be more consistent, high accuracy, precise but the price is not affordable (KBBI, 2011). Article 4, 5 uses an observation sheet, article 7 uses a scale stai checklist sheet questionnaire to measure anxiety. This instrument has a 4-point Likert scale, filling out the questionnaire respondents are required to choose one alternative answer for each item. For the state anxiety dimension, Respondents are required to choose one alternative answer according to what they felt at that time (Rahmawati, 2020). The advantages of this STAI test is to allow differences in the state and nature of anxiety to be properly investigated however the STAI number is made transparent (Kaplan et al, 2010).

Judging from the number of research samples, the advantages of the seven articles These studies include the first, second, third, fourth, and sixth articles already meet the number of representative samples because the number is more than 30 respondents. As stated by Sugiono (2015), where the research sample used should be more than 30 respondents. As for the lack of articles, the sixth and seventh studies did not use a sample of 30 respondents.

Research that uses statistical data analysis of sample size is the most minimum is 30 people (Baley in Mahmud, 2011). In line with the opinion Rescue in Sugiono (2012), suggested about the sample size for research that is, the appropriate sample size in the study is between 30 to 500. If the sample is divided into categories, the number of sample members in each category is a minimum of 30. If the research will perform multivariate analysis (correlation or multiple regression for example), then the number of sample members is at least 10 times the number of variables studied. For simple experimental research, the using the experimental group and the control

group, then the number of members each sample is between 10-20.

According to Gay in Mahmud (2011, p. 159) argues that the minimum sample size that can be sent based on the research method used is: Descriptive method of at least 10% of the population. For relative population small at least 20%. Correlational descriptive method of at least 30 subjects, method ex post facto, a minimum of 15 subjects per group and a minimum of 15 experimental methods group subject.

In the seven research articles, there are similarities in articles one to three The seven oxytocin massages were carried out on postpartum mothers with an average respondent of aged 20-35 years. According to (Rahmawati et al, 2013 in Nirmala et al, 2017) age mothers who support the process of pregnancy, childbirth, and breastfeeding between 20 up to 35 years, because at this age it is often considered a healthy reproductive age ge under 20 years is still considered immature both physically, psychologically, and physically psychological. To face the period of pregnancy, childbirth, and breastfeeding, age Mothers over 35 years of age are considered dangerous because the function of the reproductive organs and physical fitness will decrease. In Widuri's theory, (2013) that mothers who are still Younger mothers will produce more milk than older mothers, In addition, there are also similarities in the same massage steps, namely massage on the spine (vertebrae) on the 5-6 ribs to the scapula so that it will speed up the work of the parasympathetic nerves to convey commands the back of the brain so that the hormone oxytocin comes out.

In the seven research articles, there are differences in the third article, the fourth and sixth did not explain the timing of the oxytocin massage while The first article in the intervention group was given oxytocin massage with a duration of 3-5 minutes, the fifth article in the





intervention group was given oxytocin massage with a duration of 5- 10 minutes and the seventh article of the intervention group was given massage 2 days on the first and second after delivery, before breastfeeding and can be repeated several times after breastfeeding mothers do several times a day with a duration of 3- 5 minutes while the second article has explained the timing of the oxytocin massage for 15-30 minutes by doing oxytocin massage for 3 days every morning day. This is in line with the theory according to (Sari, Salimo, and Budihastuti, 2017), massage Oxytocin is done 2 times a day, preferably every morning and evening before bathing and 30 minutes before breastfeeding in order to get the best results maximum. Oxytocin massage is performed on a back massage from the skin to skin with Moderate pressure resulting in an increase in the hormone oxytocin and a decrease in adrenocorticotropin in postpartum mothers before breastfeeding in order to get r in these hormones the maximum. Oxytocin massage is effective immediately after the mother gives birth to the baby with a duration of  $\pm$  15 minutes, the frequency of giving massage 1-2 times a day (Depkes RI, 2018).

Only the second research article by Purnamasari et al (2021) has been published explained the oxytocin massage intervention according to the SOP, but the other six articles have not fully explained the management or intervention. This is in line according to the Indonesian Ministry of Health (2008), that oxytocin massage can be done with SOPs, namely: by removing the top of the mother's clothes, the mother tilts to the right or left, then hugging pillows, or prone. Next, put on a towel and smear both massage hands with oil or baby oil. Massage along both sides of the bone back using both fists, with the thumb pointing to the front. Cervical spine area, look for areas with the most prominent bones, the name is processus spinosus / cervical vertebrae 7. Pressing firmly on both sides spine forming small circular

movements with both mothers his finger. At the same time, massage both sides of the spine downwards, from the neck towards the shoulder blade. Finally, clean the mother's back with a washcloth and water warm. Time of implementation Oxytocin massage is carried out immediately after the mother gives birth to the baby with a duration of  $\pm$  15 minutes, the frequency of giving massage 1-2 times a day. Same by a book published by Bobak, (2005) that the duration of oxytocin massage can perform for 2-3 minutes with a frequency of massage 2 times a day. Massage oxytocin is effective on the first and second day after delivery because on those two days breast milk has not been produced enough (Hartiningtiyaswati, 2015).

### Relevance of Results

The advantages of the seven articles, in the first article in presenting the results of the effect of oxytocin massage on breast milk production by presenting categories sufficient and insufficient breast milk production, in the intervention group and the control. The results of research conducted on 30 respondents showed that milk production before the oxytocin massage intervention was carried out as many as 30 respondents with less category. Prior to the massage, oxytocin showed an increase in Breast milk output is 4.25 times greater than before massage intervention oxytocin.

The second article in the presentation of the results of the effect of oxytocin massage on breast milk production by presenting the category of milk production before being given treatment in the intervention group was 8.76 mL. While the mean of the control group was 7.59 mL. The average production quantity of Breast milk after being given treatment in the intervention group was 18.79 mL. While the mean in the control group was 15.92 mL. The average difference in Milk production in the intervention group was 10.03 mL. While the mean difference in the amount of milk



production in the control group was 8.33 mL grams. Average weight The baby's body weight after being given treatment in the intervention group was 3918 grams. While the average in the control group was 3669 grams. More analysis test results Furthermore, with the Wilcoxon test, it can be concluded that there is a significant difference in the mean difference in infant weight gain between the intervention group and the control ( $p=0.000$ ). The mean frequency of breastfeeding after the intervention was given to the intervention group was 15.63 x/day. While the mean in the control group is 14.80 x/day. There is a significant difference in the mean frequency of breastfeeding after being given an intervention between the intervention group and the control group ( $p=0.000$ ). The average frequency of infant urination after being given treatment in the intervention group was 9.55 x/day. While the mean in the group control was 8.65 x/day. There is an effect of giving oxytocin massage to the group intervention, it was seen that there was an increase in the mean frequency of infant urination greater than the control group. The average difference in waste frequency of Infant urination in the intervention group was 1.2 x/day. While the average difference in the frequency of infant urination in the control group was 0.7 x/day.

The third article to measure the increase in breast milk production with using a digital scale by looking at the baby's urine by weighing baby diapers, every baby pees in grams and then converts it in units of ml per 1 gram of urine = 0.975 ml, the baby's urine output is assessed in 24 hours based on the results of independent t-test p-value 0.000 average milk production with measuring urine volume in mothers who did not receive oxytocin massage by 1,267 ml and mothers who received oxytocin massage had the average milk production by measuring the urine volume of 1.933. The fourth article in presenting the results of the effect of oxytocin massage on milk

production by presenting the category of oxytocin massage before giving treatment in the intervention group. In primiparous postpartum mothers after Oxytocin massage was carried out with a P-value of  $<0.05$ , which means that there was an effect of massage oxytocin on primiparous postpartum mother's milk production in the group experimental and control groups. There is a difference in the number of frequencies massage was done with oxytocin massage not done.

In the fifth article, we present the results of the effect of oxytocin massage on milk production in the treatment group and control group that the presence of significant difference in milk production in the treatment group and the control that there is a significant difference in breast milk production by assessing an increase in the volume of breast milk of respondents who are given the intervention will result in The effect of oxytocin massage has been s Bhyo warned to ninticnрге adsaeta milk production. The average amount of breast milk production on the 10th day of postpartum massage oxytocin is 102.00 ml. The average amount of breast milk production in postpartum mothers on day 10 with oxytocin massage was 102.00 ml with a standard deviation of 19,889, while for postpartum mothers who did not do massage oxytocin 57.50 ml with a standard deviation of 9,789. Statistical test of research results shows that  $p = 0.000$  means that at 5% alpha there is a significant difference in the average amount of milk production among postpartum mothers who do massage oxytocin and postpartum mothers did not do oxytocin massage.

The sixth article presents data on the effect of oxytocin massage on milk production by assessing breast milk production indicators such as breast milk volume, and The baby's weight gain is then recorded on the observation sheet. That there is a significant difference between the control group and the intervention group about the baby's



weight, the p-value of the independent sample t-test is 0.0001, so concluded that there was a significant difference; and about the amount of breast milk, p-value 0.053, so it is concluded that the difference is important. The seventh article presents the results of the effect of oxytocin massage on breast milk production in the group treatment and control groups that there is a significant difference in production Breastfeeding by assessing the increase in the volume of breast milk of respondents who were given the intervention will produce more milk than the control group. By presenting these data, the effect of oxytocin massage has been proven to increase milk production.

The disadvantages of the seven articles, the first article only displays breast milk production is sufficient and not enough, in the third article we look at breast milk production by assessing the baby's urine for 24 hours after being given oxytocin massage, no displays data on the increase in the baby's urine for 24 hours, in the fourth article assessing breast milk production only assesses the frequency of breastfeeding the baby in the fifth article only presents the results of the average difference in breast milk volume between groups control and intervention groups, in the sixth article looked at breast milk production with assess breast milk production indicators such as breast milk volume, and infant weight gain, in the seventh article of breast milk production by assessing the increase in breast milk volume respondents who are given the intervention will produce more breast milk compared to the control group. But from the six articles, the results can be compared with the second article to get a conclusion from the objectives of this study by assessing the indicators of the success rate of breast milk production more varied than the other six articles seen by distribution Characteristics of respondents in this study include Amount of breast milk, frequency breastfeeding the baby, the baby's weight and the

frequency of the baby's bowel movements and the mother's sleep rest.

The assumptions of the seven advantages of the research articles used in this study are: this article review all articles have the same purpose in outline for determining the effect of oxytocin massage on breast milk production in postpartum mothers and It can be concluded that the effect of oxytocin massage on breast milk production we can judge from the increase in the amount of milk production, and indicators in the assessment smooth milk production before and after the intervention, where the results can meet the needs of the baby every day. The results of research on The first article mentions the oxytocin massage intervention and its effects on Breast milk production are seen from the increase in the amount of milk volume production before and after breastfeeding after being given oxytocin massage, in the second article mentions massage intervention oxytocin to increase milk production seen from the average amount of production the volume of breast milk, the average increase in the baby's weight, the average frequency of breastfeeding babies, and the average baby urination before and after being given massage oxytocin, in the third article mentions the oxytocin massage intervention and the results its effect on milk production can be seen from the increase in the amount of baby urine after breastfeeding given oxytocin massage, in the fourth article the oxytocin massage intervention with assessing milk volume production before and after oxytocin massage. In the article, the fifth oxytocin massage intervention by assessing the volume of breast milk production before and after oxytocin massage, in the sixth article mentions oxytocin massage intervention can increase milk production seen from the production of breast milk volume and increase baby's weight after being given oxytocin massage intervention. And in the seventh article To assess breast milk production, look at the volume of breast milk.



Then for a more effective assessment of increasing breast milk production by assessing the frequency of feeding and the frequency of urination released after oxytocin massage according to the theory (Roesli, 2012) the more the baby suckles, the better the milk production will be because the more high levels of oxytocin in the blood circulation which will stimulate prolactin to continue to produce breast milk, usually babies suckle 8-12 times a day, milk production enough can be assessed from the frequency of urination will be more frequent 6-8 times in a day. The more often the baby suckles at the mother's breast, the more the production and milk production will increase. The frequency of the baby in breastfeeding very affects the production of breast milk produced, the more often the baby sucks and empties both breasts, eating breasts will also prepare for the next breastfeeding process so that the hormone in charge of producing breast milk and flowing breast milk will run optimally (Kuguoglu et.al., 2012 Sari, 2017).

### Limitations

During the process of collecting and summarizing the literature, there were several limitations experienced by researchers, these limitations are as follows:

1. The literature search process is still not optimal, due to limitations in determining choosing the right keywords, so that articles that match not many themes appear.
2. Some research articles are not available in full-text open access so that reduce the number of studies reviewed
3. The process of analyzing articles in English is still using the application so that after being translated, the sentence must be read and rearranged so that it can be understood
4. The number of variables studied is not uniform and not all

variables are studied in each study affect the process of synthesis of research results

5. Searches that are carried out only based on the internet with databased without making contact with research from the research included in the literature review. This limits the number of relevant research studies so that a potential for publication bias.

### Conclusion

From the results of the literature review that has been presented, all articles explain that in the results of the study there was a significant effect between oxytocin massage on milk production. So, this study, shows that oxytocin massage is effective in releasing the hormone oxytocin which is a hormone that can increase breast milk in postpartum mothers. Oxytocin massage is an alternative way to reduce the mother's unstable emotional state. This situation can help in the process of producing breast milk. By doing oxytocin massage, the mother will feel relaxed and calm, therefore it will increase the hormone oxytocin and prolactin where these two hormones will affect the amount of breast milk production and milk production.

### Suggestion

From the results of the literature review articles that have been carried out, the suggestions are:

1. The results of this literature review study are expected to be an addition to knowledge for students and for educational institutions, for health practitioners as a reference evidence-based midwifery in providing services in the postpartum period, especially in handling the problem of breast milk production.
2. The information obtained can add knowledge to further researchers, however, research can be done using other research methods that can minimize confounding factors so that the results will be more effective and



develop this literature review study and compare it with other variables. As well as the use of this method design due to the limitations of related researchers in conducting research data sampling in the field due to the Covid-19 pandemic.

3. Expected that the results of this literature review can be a reference in efforts to increase the production of breast milk and for future researchers, it can be the basic material for researching the most effective interventions to improve Mother's Milk Production.
4. Expected that for the application of a later literature review, it is better to use data-based more so that you can get more complete and relevant articles, and the year limit for searching articles with the specified keywords is five the last year so that the literature is more updated and can use literature studies in outside Indonesia.

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