

INTERVENTION CONVENTIONAL IN OVERCOME PROBLEMS BREAST SWELLING IN BREASTFEEDING MOTHERS : OVERVIEW SYSTEMATIC

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Vol.17 No.2 | June, 2023

Submit :
16/03/2023

Accept :
05/06/2023

Publish :
16/06/2023

Abstract

Introduction : Breast engorgement is the most common problem experienced by breastfeeding mothers , which appears on the day second to fourth post labor . If the problem of swelling is not treated immediately, then will impact on milk production . **Method :** Do review systematically on 1046 articles various intervention conventional method that can be applied in the treatment unit with using an international database such as : SAGE, Proquest , EMBASE, Taylor & Francis, and succeeded found ten intervention conventional in overcome breast swelling . **Purpose :** Identify various intervention conventional in overcome problem swelling of the breasts in nursing mothers in the treatment room . **Result:** Deployment non-pharmacological intervention proven effective overcome swelling of the breast and pain in the breast in the treatment room on an average day third and fourth ($P=0.000 - 0.001$; $Ci 95 \%$). Participants who get education with therapy conventional own higher odds _ For provide exclusive breastfeeding . **Recommendation :** Intervention conventional effective reduce breast swelling , breast tenderness and increase exclusive breastfeeding _ during is at treatment room . Application education breast-feed with gift therapy Conventional medicine is very beneficial for breastfeeding mothers in the treatment room.

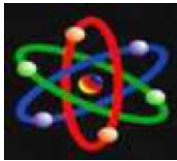
Keywords: Education _ breastfeeding , Intervention quasi-experiment , Breastfeeding , Breast Swelling , Overview systematic

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<http://publikasi.lldikti10.id/index.php/jit>

DOI : <https://doi.org/10.22216/jit.v17i2>

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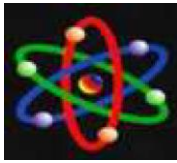
INTRODUCTION

Giving Mother's Milk (ASI) in early life become important role in guard health and grow flower baby next . Breastfeeding presentation in a manner exclusively worldwide based on data from the World Health Organization (WHO) in 2020 has experience upgrade to 44% compared to 2016 which was only reach figure 38% . United Nations Children's Fund (UNICEF) and WHO have also recommend breastfeeding for 6 months without any additives . Although ASI has proven benefit in _ increase health baby , but in the process of giving it often found problem . Problems breast-feed started when mom was still is at treatment room , some research disclose problems faced by mothers during Still is at in the treatment room , including : 40% of post partum mothers are unable do sticking with right , result nipple abrasions and injuries , mothers do not get enough support or education from health workers (Feenstra et al., 2018) . Na Apart et al., (2021) in his research convey 90% of breastfeeding mothers experience swelling of the breast when was in the treatment room . Problems swelling experienced by breastfeeding mothers it can even make the mother stop breastfeeding when Still are in space nursing (Spiroski et al., 2022). Globally obtained numerical data _ incident breast swelling is 1:8000 and in India 1:6500 mothers, generally swelling occurred on the 3rd and 4th day post childbirth , two- thirds of mothers even feel painful press on the breasts that appear on the 5th day post childbirth (Hassan Shamekh et al., 2022).

According to data from the Association of Southeast Asian Nations (ASEAN), the percentage of mothers who experience it ASI dam thus resulting happening breast swelling in postpartum mothers deliveries in 10 countries including Indonesia in 2015 reached 66.87% a number of 95,698 of 107,654. WHO data (2017) provides data on the percentage of occurrence breast milk dams in the United States 66.34 % or 6543 mothers. Based on Survey data The 2017 Indonesian Health Demographics (SDKI) in Indonesia, breastfeeding mothers who experience ASI dam of 15.6% or a total of 35,985 mothers.

Swelling of the breasts is a physiological problem of the breastfeeding process that occurs in the first two weeks breastfeeding , breast engorgement may occur Because increase in milk volume suddenly , happened blockage in the vessels blood (Ozkaya & Korukcu , 2022). Swelling of the breasts in nursing mothers may occur consequence inadequate breastfeeding so that the remaining milk cause happening blockages in the milk ducts (Duygu & Asli, 2022) . In his research , Yilmaz et al., (2018) also corroborates happening swelling of the breast caused baby ca n't breast-feed optimally , so the mother will feel her breasts getting heavier and bigger , feeling uncomfortable when the milk comes out. Swelling of the breasts in nursing mothers generally experienced on the 2nd to 4th day after giving birth , causing the breasts to feel hard and full, causing pain in nursing mothers (Aprilina et al., 2021). In more severe cases , the mother can experience





fatigue , decreased appetite , body chills , weakness . 15% of mothers have ongoing fever in 1 day , the temperature is less than 39oC (El- Saigy & Aboushady , 2016) .

Problems with swelling of the breasts in the treatment room , must be priority to help breastfeeding mothers in a longer time. In his research , Karatay et al., (2018) convey that breastfeeding mothers must ensure that the breasts continue to flow milk that can be excreted in a manner effective and milking done in a manner routine . The nurse's role is very large participate increase maternal welfare , promoting skills do management lactation in nursing mothers , guiding mothers and demonstrating express milk until the mother can do it in a manner independently after completing breastfeeding (El- Saigy & Aboushady , 2016). The nurse must also focus on the mother 's breast swelling , giving education for mothers do massage light and gentle before feeding and implementing some interventions to prevent it from happening severity of breast swelling (ACOG, 2021) . Multiple interventions in overcome swelling of the breasts in nursing mothers which are generally carried out based on research results : warm compresses before breastfeeding , therapy _ compress cold , expressing breast milk, breast massage , and giving oral anti- inflammatory drugs which can be done two to three times deep a day . (Saini, 2014; El- Saigy & Aboushady , 2016). Objective review systematically this is For know any intervention _ conventional For overcome swelling of the breasts in nursing mothers in the treatment room ?

METHOD

Overview this systematic use in accordance with guidelines Preferred Reporting Items For Systematic Review (PRISMA). Literature selected that is focuses on interventions that can address breast swelling in the postpartum ward.

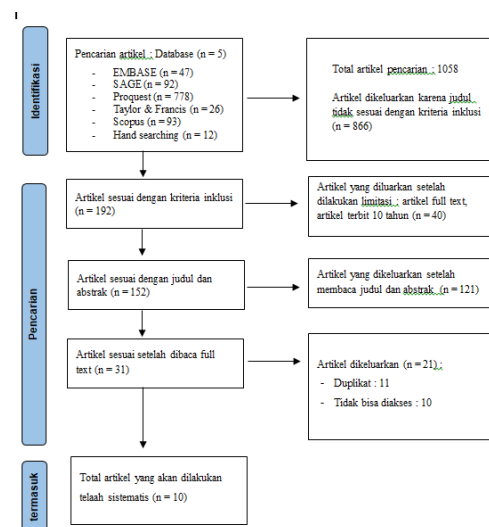
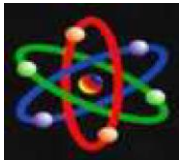


Figure 1. Criteria Inclusion

All articles with quasi- experiments and RCTs included in review satisfying systematic _ criteria as following : (1) Participant is a post partum mother with normal birth or caesarean section (2) available breast-feed the baby during was in the treatment room (3) experienced swelling marked treatment time with : fever, swollen and reddish breasts , (4) article study published in Language English (5) there are research results namely : a decrease in breast swelling experienced by breastfeeding mothers . kindly Overall , the articles obtained





totaling 1046 articles through the database of the University of Indonesia, then an assessment was carried out critical with use Joanna Brings Institute (JBI) (2020) and 10 articles stated in accordance with applicability _ in review this systematic . For avoid internal bias review systematically , then an examination is carried out literature by Imami Nur Rachmawati .

In review this systematic , set definition from Breast engorgement is a common physiological problem for nursing mothers , which can be caused Because acceleration excess secretion _ speed poor milk production or latch from babies (Wong et al., 2017). Way to know exists internal breast swelling review systematic is with use Hill & Humencik , (1994) rating scale consists of the 6 criteria : (1) soft breasts , no change in breast shape (2) slight changes in breasts (3) hard breasts , but not painful (4) hard breasts , starting to hurt (5) hard and painful breasts (6) breasts are very hard and very painful . Search literature on review This systematic use database with article speak English from : EMBASE, Proquest , Taylor & Francis, SAGE, Scopus which can be accessed at the University of Indonesia. Article used is articles published 10 years ago in 2012-2022 . Search literature using keywords _ as following : breast engorgement AND intervention nursing AND post partum , "engorge" OR "breast problem" OR "breast engorgement" AND intervention AND prenatal OR " post partum " AND

control trial.

Characteristics Respondents

Respondents in review systematically is appropriate with criteria Inclusion set : mother r meane aged > 18 years, primiparous mothers but aged > 35 years by 16.7% or a number of 24 people Lim et al., (2015), and multiparous mothers submitted Aprilina et al., (2021) of 53.3%. Whereas Na Apart et al., (2021); El-Saidy & Aboushady , (2016) has criteria Respondents with an average age of 26 years were 86.7%, and ages > 20 years were 14.3%. kindly whole characteristics respondent obtained the average data of respondents namely : primipara mothers 80%, with SC births of 60 % , mothers aged 20-35 years by 70% , housewives by 80%, mother's education 40% high school graduates .

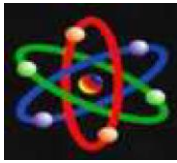
Swelling Scale

In review this systematic , nine article use measurement with Hill & Humenick scale , (1994) with 6 criteria evaluation in measure breast swelling . Measurements can be made independently by mothers before and after gift intervention . Swelling of the breasts that occurs , has score 5-6 before being awarded intervene and experience decline scale to 2-3 after administration intervention .

Influence Intervention on Decline Breast Swelling

Found interventions in drafting review this systematic , is non- pharmacological



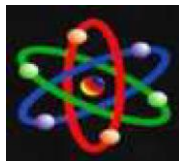


interventions , namely : therapeutic breast massage , reflexology foot massage , breast massage with using olive oil , compress ginger warm , compress tongue

crocodile , warm water compresses , and the most found is compress leaf cabbage / cabbage .

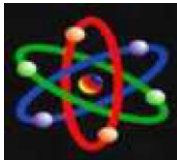
No	Author	Article Title	Objective	Research Design	Sample Study	Research Results	Recommendation
1	pipe Na Apart , Restuning Widiasih , Ida Maryati , Yanti Hermayanti , Windy Natasya	<i>The Effectiveness Of Cabbage Leaf Compress And The Education Of Lactation Management In Reducing Breast Engorgement In Post Partum</i>	Know effectiveness compress leaf cabbage and education management lactation For reduce swelling of the breasts in postpartum mothers	Experiment pseudo with non- equivalent control group design .	Sample in study chosen in a manner <i>purposive sampling</i> . 60 postpartum mothers who experienced physiological breast swelling included in this research .	There is difference on scale swelling of the breast before the intervention with the median value +- min max (3.00 +- 2-6) and after the median +- min max (2.00 +- 1-2) while in the control group breast swelling before treatment , showed a median (2.00 +- 2-5) after administration action is +- min-max (2.00 +- 1-5)	Combination gift intervention compress leaf cabbage and education management lactation can be proven effective in reduce swelling in the breasts of postpartum mothers during treatment room . this intervention can be used alternative in overcome swelling of the breasts, besides that cabbage easy found in the market traditional and at very affordable prices by all circles , and as effort Follow up when mother is back at home.
2.	Happy Dwi Aprilina , Krislingardini , Nur Isnaeni , Suratmi	<i>The Effect Of Cabbage Leaves Compress On Breast Engorgement In Post Partum Mother</i>	For know influence gift compress leaf cabbage to breast swelling	In This study used a pre- experimental design with pre and post tests in one group.	Election sample in study use <i>consecutive sampling</i> and obtained 30 respondents . Criteria inclusion : postpartum mothers undergoing treatment , infants take care join , mother can read and write , willing breast-feed the baby . Criteria exclusion : postpartum mothers with HIV and	Characteristic results experienced respondents _ breast swelling is age 20-35 years, junior high school education, employment status as housewives and multiparous mothers . application intervention in 29 mothers (96.7%) who experienced breast swelling on a scale of 3 can decrease to	Compress leaf cabbage on the breast after feeding capable reduce the resulting pain breast swelling , even after each milking .





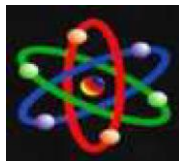
					HBsAg (+), mother with breast abscess , baby formula fed , baby died .	a scale of 2 after the intervention . compress leaf cabbage proven effective to subtraction swelling of the breasts in postpartum women (p = 0.000)	
3.	Boo Boi Wong, Yiong Huak Cahn, Mabel Qi He Leow , Yi Lu, Yap Seng Chong, Serena Siew Lin Koh, Hong-Gu He	<i>Application Of Cabbage Leaves Compress To Gel Pack For Mothers With Breast Engorgement : Randomized Controlled Trial</i>	For test effectiveness cool gel pack application with leaf cabbage cold to pain , swelling of the breast during breastfeeding .	Use studies pretest three control groups random and post test repeated . mother by random entered into the intervention group . - Intervention 1 (application leaf cabbage cold and routine care) - Intervention 2 (cold gel pack application plus routine maintenance) - Intervention 3 (routine care only)	227 mothers who experienced swelling of the breasts on return from a private mother and child hospital in Singapore. Criteria inclusion in research : 21 years and over , breastfeeding baby and experience breast swelling in 14 days post childbirth , capable read and write .	mother who is grouped One namely : application leaf cabbage cold and routine maintenance compared to with the control group , starting from 30 minutes after administration First leaf cabbage (mean difference =y0.38, p=0.016) or gel packs (mean difference =y0.39, p=0.013). If compared with the control group , mothers in the leaf group cabbage experience decline significant breast hardness at all post time points intervention , and mothers in the gel packaging group experienced decline significant breast firmness at two time points (1 hour). And 2 hours after application	Leaf cabbage cold and cold gel can reduce pain and hardness in breast swelling and can be recommended in post mothers give birth to For manage breast swelling





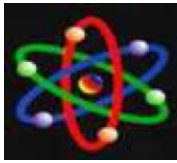
						first and second)	
4.	Witt et al., (2016)	<i>Therapeutic Breast Massage In Lactation For The Management Engagement , Plugged Duct And Mastitis</i>	For describe response <i>Therapeutic Breast Massage In Lactation</i> (TBML) in overcome breast swelling , ducts stuffiness and mastitis, reduce pain in the breast and mother get technique learning for the problem .	Studies prospective shared into 2 groups : group 1 : designed For evaluate TBML efficacy on swelling , in group 2: accompanied counseling lactation , gave support breastfeeding , education massage with hand	42 mothers were analyzed , experienced swelling 36%, duct clogged 67%, mastitis 29%	Swelling results rated with scale 6 points humenick . TBML delivers choice treatment for the problem of breast swelling that occurs in 2 days post labor . Number of mothers experiencing swelling experience decline in a manner significant (93% VS 7%, p < 0.001) after TBML. Average value swelling before treatment was 5.31 and decreased to 3.48 after TBML.	TBML therapy can provide effect Reduction of pain and swelling in the breasts direct , reduce severity swelling and reduction in size direct . TBML therapy can be recommended together with gift therapy compress warm or cabbage cold when you are at home.
5.	Priyanka Chaudhary, Tajnisha Banu, Ankur Farwal	<i>A Study to Assess the Effectiveness of Olive Oil Massage in Reducing Breast Engorgement and Pain among Postnatal Mothers with LSCS Admitted in Selected Hospital at Meerut</i>	Evaluate effectiveness olive oil massage in reduce breast swelling and pain in post mothers deliveries treated at selected hospitals in Meerut.	Quasi experimental , non randomized control group design data were collected during period six weeks.	60 post mom experienced childbirth _ swelling and pain in the breast at Meener Hospital . Respondents in the study was divided into 2 groups, 30 mothers were grouped experiment and 30 mothers were grouped control . In the experimental group , intervention	Score average swelling of the breasts in the post experimental group and the control group in the right and left breasts showing decline score swelling by 79%, so it is proven in a manner significant against p < 0.001 at the 0.05 level .	Application of olive oil proven can effectively reduce breast swelling in postpartum mothers childbirth , and is non-pharmacological techniques that are effective , economical cost and non- invasive .





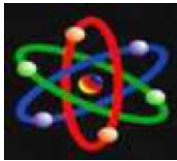
					massage given 2x/ day , with an interval of 6 hours for 10-15 minutes , the control group was not given intervention		
6.	A- Reum Lim, Ji-Ah Song, Myung Haeng Hur , Mi-Kyoung Lee, Myeong Soo Lee	<i>Cabbage Compression Early Breast Care On Breast Engorgement In Primiparous Women After Cesarean Birth : A Controlled Clinical Trial</i>	Investigate effect of Early Breast Care (EBC) and Cabbage Compression Early Breast Care (CCEBC) on reduction breast pain and swelling in women after surgery cesarean .	Quasi non-random experiment .	In this research counted use G power analysis , based on previous studies , required 22 participants For each group. participant shared into 3 groups, in group 1 (EBC): early breast care : breast massage by professional staff , done before breastfeeding , done 3x in a day within 10 minutes on day 2 to day 4 post labor . Group 2 (CCEBC): early treatment and compresses cabbage is done like group 1, the time difference is done for 20 minutes . Group 3 : be treated accordingly with RS standard	The research results obtained , occurred meaningful difference _ in all three groups on the 3rd day post childbirth , seen decline swelling of the breast before breastfeeding , and score decline swelling Lowest was in group 2 (CCEBC). Breast swelling was done 6 times, and showed exists decline significant swelling _ over time (F= 4.932, P= 0.001)	Breast care for overcome swelling with early breast care and compresses cabbage proven effective . Measuring tool swelling with using a durometer, proved to be suitable , but further studies are needed, because there is not yet one study with use measuring tools with this durometer before.
7.	Abber Hasam Shamekh , Afaf Hassan Ahmed, Naglaa Zaki Hassan Roma, Amany S. Badawy	<i>Effect Of Warm Ginger Versus Cold Aloe Vera Gel Compress On Breast Engorgement Among Postnatal Mothers : A Comparative Study.</i>	Know influence compress ginger warm versus compressed tongue gel crocodile cold on post-mother's breast swelling labor .	Studies comparative quasi experiment . The study was conducted at the El- Shatby maternity hospital in Alexandria.	60 post mom give birth . Shared into 2 groups. Group 1 : accept intervention compress ginger warm and group 2 : accept compress tongue crocodile cold .	The results of this study were obtained application compress ginger warm proved more effective lower breast swelling compared use compress tongue crocodile cold , on day 7	Use compress ginger warm can accelerate healing on breast swelling and relieve pain without effect side . Compress ginger can be used as an alternative to reduce mild non - pharmacological swelling used and





						after intervention (23.3%), compared with the tongue gel compress group crocodile cooler (6.7%), though the relationship was not significant statistically _	available .
8.	Naglaa F. Ahmed	<i>Effect of foot reflexology on breast engagemet among lactating mothers</i>	Evaluate effect foot reflexology on swelling nursing mother's breast	Quasi experiment	100 nursing mothers in Maternity Hospital , Egypt divided into 2 groups, respectively totaling 50 mothers.	Mothers in the intervention group underwent significant changes before being administered intervention p=0.0672 and after being given therapy foot reflexion to be p=0.001 in breast swelling	Massage foot reflexology is proven to be efficient non - pharmacological therapy . Foot reflexes can be used program development in antenatal classes for add knowledge in overcome swelling of the breast.
9.	Habib W, Hanif S	<i>Efficacy Of Non-Thermal Ultrasound In The Management Of Breast Engorgement In Post Partum Women: A Random Controlled Trial</i>	Determine luck of non- thermal ultrasound in handling breast swelling	RCTs	52 Post Mother labor with breast swelling is involved in a manner in study to enter into two groups: experimental with non-thermal ultrasound and control with service hospital standard for 2 days of treatment.	There is no swelling of the breasts before and after difference significant (P>0.05) in the control group and the experimental group . on score swelling happen difference significant (P<0.05) in the experimental group compared to the control group	Use of non-thermal therapeutic ultrasound during 3 treatment sessions in two days in a manner succession can be effective overcome breast swelling and can be recommended For used in space maintenance with cooperate officer clinical physiotherapy .
10.	Tawheda Mohamed Khalefa El-Saidy , Reda Mohamed-Nabil Aboushady	<i>Effect Of Two Different Nursing Care Approaches On Reduction Of Breast Engorgement Among Postnatal Women</i>	Reduce breast swelling in postpartum mothers childbirth and for compare effect compress warm and leaves cabbage cold on breast	Quasi experimental pre- post test group in Cairo, Egypt .	90's mom post delivery at El Manial Hospital , Egypt which was divided into 2 groups: control and experiment	More than 20% in each group of mothers experienced swelling of the breast (appearing breast) tight), Application leaf cabbage cold	In services in the treatment room , nurses can be trained for use combination compress warm and compress cabbage cold in overcome breast swelling and





swelling	and compress warm effective For relieve breast swelling and reduction score level breast swelling (p<0.05)	doing detection prevent it from happening early swelling of the breasts in nursing mothers post labor .
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Table 1. Various Intervention Conventional Applied in Post- Care Units Labor

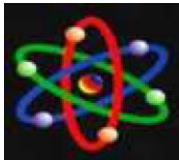
From a total of 10 articles obtained , the whole intervention in article done with use method learning individual , officer health do direction and practice method apply intervention in a manner direct to participant research . In observation , it was proven that 10 interventions were found to be applicable For lower measurement scale breast swelling . Application intervention applied for 10-20 minutes and carried out 2-3 times per day , the average intervention was carried out on the day second , day third , and day fourth during the treatment period, and within observation visible , addition gift education management lactation and early breast massage given _ as additional intervention , showing score reduction in breast engorgement , and good breastfeeding support . Decline scale on the swelling that occurs , scale 3-4 before the intervention , complaints that the breasts feel hard and painful light , be scale 1-2 after the intervention , hard breasts reduced and painless . On application intervention massage foot reflexology and massage therapeutic need the help of professionals who already have special certification for do it , meanwhile seven other interventions , participants _ in research can do it in a manner

independently , all the tools used For very easy intervention provided . One intervention using special tools and carried out by professional staff , namely dermal ultrasound, its implementation need Lots costs and may not apply to all patients.

Discussion

The problem of breast swelling is a problem that is often experienced by breastfeeding mothers though Still is at treatment room . Separation care room for mother and baby become triggers breastfeeding problems , mothers feel her milk production is less, the mother is worried moment pump her breasts , and worried will condition health the baby , these issues can make the mother decide not to continue breastfeeding early (Lueng et.al, 2016). In line with the results of the research submitted Feenstra et al., (2018) there are 74% of breastfeeding mothers decide For stop breast-feed early moment Still was in the treatment room . Explained further in research , factor cause the mother decides stop breast-feed early is less get support from the closest person and feel get no help from power health moment was in hospital. The problem of swelling in the breast that occurs Because Inadequate emptying of the breast ,





generally happen within the first week after delivery (Mangesi , 2017; Huda et al., 2022) . Factor other triggers _ swelling of the breasts conveyed by El - Saïdy & Aboushady , (2016) including poor attachment , failure breastfeeding , duration reduced breastfeeding , cue _ formula feeding , no initiation Early Breastfeeding (IMD), use breast pump without indication clinical . Swelling of the breasts caused by narrowing of the lactoferrin ducts or mammary glands that are not emptied with perfect , causing the breasts to feel pain , fullness, redness of the breast, and increase temperature . Swelling often occurs during the day third and fourth after giving birth (Rutiani & Fitriana, 2017; Damayanti et al., 2021).

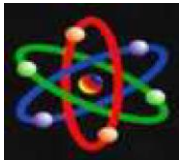
Characteristics Respondents

Respondent data based on age are >20 years and <35 years. Mother's age is included in the ready age group reproduction , where in this age group the mother has initiative For breast-feed compared to with mothers in the age group >35 years (Aprilina et al., 2021). Mother's age will also influential in milk production , in mothers group >20 years and <35 years if unable coping with continued breastfeeding producing , but not balanced with good breast emptying , then it is very possible happen breast swelling in the mother (Rahmatika , 2014). In line with research results Suksesty et al., (2017) breastfeeding mothers who experience 96.2% breast swelling aged 20-35 years. At this stage the nursing mother goes

inside the age category of adults who have physical abilities and and ability think For process the information it receives with maximal , and need support social receive breastfeeding and prevention information happening possible breast swelling during breastfeeding (Indahsari & Chotimah , 2017). Some research results also say that primiparous mothers have a greater percentage of manganese swelling due to the adaptation process operate new role in nurse baby , not yet able do good breast emptying (Çankaya & Ratwisch, 2020)

This study aimed to investigate the effect of reflexology on lactation and postpartum comfort in primiparas giving births through caesarean section. Methods: This randomized controlled trial was conducted in 100 women with first birth through caesarean section between May 2016 and May 2017. Expectant mothers were randomly included into an intervention and a control group. The intervention group consisted of mothers in whom reflexology was performed three times per day at every eight hours for 30 min for 3 days. Results: The mean scores of the breastfeeding chart system and breastfeeding satisfaction scores of the mothers in the intervention group were significantly higher than those of the controls, and the first lactation period of the mothers in the intervention group was shorter than that of the controls. Mean breast-tension, breast-heat, and breast-pain scores were similar in both groups on day 1; however, a significant increase was seen the intervention group on days 2 and 3,

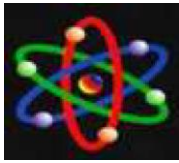




compared to those in the controls. The mean scores of the Postpartum Comfort Questionnaire in the intervention group were significantly better than those of the controls. Conclusions: Reflexology starts lactation earlier in mothers giving birth via caesarean section, supports the breastfeeding period, and increases mothers' postpartum comfort. We investigated breastfeeding difficulties experienced by mothers in the first months after delivery and their association with early breastfeeding discontinuation. We conducted a prospective observational study. Mothers breastfeeding singleton healthy term newborns at hospital discharge were enrolled and, at three months post-delivery, were administered a questionnaire on their breastfeeding experience. Association among neonatal/maternal characteristics, breastfeeding difficulties and support after hospital discharge, and type of feeding at three months was assessed using multivariate binary logistic regression analysis. We enrolled 792 mothers, 552 completed the study. Around 70.3% of mothers experienced breastfeeding difficulties, reporting cracked nipples, perception of insufficient amount of milk, pain, and fatigue. Difficulties occurred mostly within the first month. Half of mothers with breastfeeding issues felt well-supported by health professionals. Maternal perception of not having a sufficient amount of milk, infant's failure to thrive, mastitis, and the return to work were associated with a higher risk of

nonexclusive breastfeeding at three months whereas vaginal delivery and breastfeeding support after hospital discharge were associated with a decreased risk. These results underline the importance of continued, tailored professional breastfeeding support. Influence Various Intervention In Reduce Breast Swelling In Treatment Unit. In review systematically these 10 articles were found is interventions that can be used For overcome swelling of the breasts in nursing mothers during the treatment period. ten article selected is non - pharmacological interventions applied on day birth until the patient goes home, the average intervention applied on the 2nd to 3rd day , and observation in found articles _ held for 4-5 days . Mother with birth process in a manner caesar will be more vulnerable and gain difficulty within 3-4 days after giving birth , including the problem of breast swelling and causing breast pain (Çankaya & Ratwisch, 2020) . Observation in review In this systematic way , the results obtained were 60% experiencing the birth process through operation Caesar. In line with the results of previous studies , which prove 30% of mothers with the birth process caesar , get difficulty at the beginning birth because of the pain she experienced , so that it affected the breastfeeding process baby at the beginning very big birth , delay breast-feed early can cause happening swelling of the breasts on the 3rd and 4th day compared to the mother at birth vaginally (Hawkins, 2014; El- Saigy & Aboushady ,





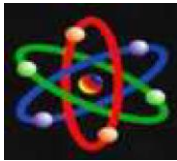
2016).

In review this systematic , intervention implemented in developing countries like Indonesia has 2 articles , Singapore, Amarica states , India, Korea, Nigeria, and Egypt there are 3 articles . Application therapy conventional can be used as alternative in overcome problem most breast swelling found is therapy with use compress cabbage temperature room as many as 3 articles . Content in leaf cabbage has the benefit of reducing swelling of the breasts of nursing mothers , the substance contained in leaf cabbage will stimulate hypothalamus For enable system effector so it happens vasodilation of vessels blood capillaries , which resulted happening increase in flow blood in and out of the blocked area so it can relieve swelling and milk can come out with fluent from the breast (Zuhana , 2017 ; Wijayanti & Widyastutik , 2018; Na Apart et al., 2021). Besides use compress cabbage with temperature space , in the observations review systematic Here, there are 2 articles use compress cabbage cold . Compress cabbage cold , give more comfort in comparison cabbage temperature space , inside his research Wong et al., (2017) presented the results of compresses cabbage slightly more effective cold _ overcome swelling , cabbage cold give comfort and reduce pain in breast swelling (Gardner et.al, 2013; Ozkaya & Korukcu , 2022) delivered matter similar , compress cabbage cold can help reduce breast swelling , but at the same time can reduce production milk

supply . Canadian Breastfeeding Foundation (CBF) also recommends termination use compress cabbage cold after mother felt comfortable , can continue with use cabbage temperature room (Ozkaya & Korukcu, 2022) . Another effective and easy compress applied is compress ginger warmer , which is considered more effective lower mark breast swelling compared application compress tongue less crocodile _ effect pain in swelling experienced by nursing mothers (Hassan Shamekh et al., 2022).

The problem of breast swelling can also be overcome with provision of early breast care , namely : perform breast massage , the nurse is responsible guide and demonstrating using props , including ways expressing breast milk (Ozkaya & Korukcu , 2022). Breast massage is considered a good and effective way For launched circulation circulation blood and lighten inconvenience Because breast swelling . use of olive oil provide more benefits, besides being able to enrich body with good fats, reduce cholesterol evil , olive oil can also help vessels blood is more elastic (Chaudhary, 2020). Same as compress cabbage , olive oil is method simple without giving away effect side . Method massage besides breast massage is massage Foot reflexes are also assessed capable overcome problem swelling of the breasts, but F. Ahmed, (2019) foot reflexology in implementation need special training that nurses need to have certification specifically . Another way that can also be applied is with using





thermal ultrasound performed by a doctor, therapy given three day and proven capable reduce swelling of the breast (Habibu & Hanif, 2017).

Besides application intervention , giving education will help mom have belief For breast-feed the baby lasts longer, the mother feels more relaxed, and the mother's understanding of the benefits of breastfeeding will increased trust _ inner mother _ breastfeed _ _ infants (Naseparat et al., 2021). In study about practice breastfeeding , nurse support through gift education breast-feed during being in the treatment room can be mother's motivation for breast-feed the baby lasts longer (Anderson et al., 2016) .

Limitations

Overview this systematic experience limitations , only observations are made while the mother is breastfeeding undergoing post -care labor . Study further can be done with observe further _ application therapy conventional at home overcome breast swelling . In making review systematic , constraints search article Lots found limitations language , articles used _ only those using Language English , available four article in Language arabic , can not be followed include in observation review this systematic . Observation implementation intervention in review this systematic only enclose interventions performed during breastfeeding _ was in the treatment room ie day first till day fifth.

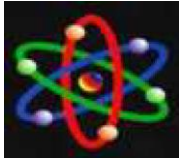
Implications

Swelling of the breasts experienced by nursing mothers when treatment room will become determinant breastfeeding the baby after leaving the hospital. Health workers on duty must be equipped with knowledge therapy conventional For applied during give care nursing in overcome swelling of the breasts that occur in nursing mothers , administration therapy conventional can deliver reaction in a manner immediately after applying it in overcome swelling of the breasts namely : occurs decline scale swelling and pain caused , therapy _ Conventional does not require high cost , and materials used easy provided . Giving therapy This conventional method can also be continued after the mother has undergone a period of treatment at home.

CONCLUSION

Swelling of the breasts experienced by breastfeeding mothers can make mothers decide For stop breastfeeding . Importance involvement officer health in assist mothers to guide and implement method conventional besides treatment medical is very helpful in overcome breast swelling . Intervention conventional which can implemented and the patient can perform intervention in a manner independent namely : compression cabbage , breast massage with olive oil , and administration education management lactation will make mom decide longer to breastfeeding and mothers feel more confident self .





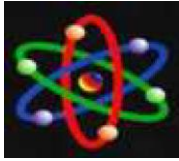
Acknowledgments

Mrs. _ Imami Nur Rachmawati, S.Kp., M.Sc. as the Fact-Based Nursing Course Coordinator (KBF), and internal advisor making review this systematic . To whole colleagues _ interest maternity services that have supported and provided advice making review this systematic

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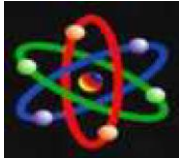
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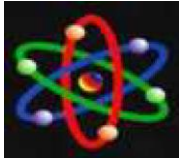
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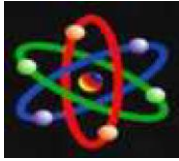
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