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## Literature Review: Cabbage Leaf Compress Intervention on Breast Swelling in Postpartum Mothers

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### ABSTRACT

**Purpose:** Identify the application of cabbage leaf compress to reduce the incidence of breast swelling in postpartum mothers. **Methods:** literature study of 5 scientific articles obtained through the Google Scholar database, published between 2020 and 2023. **Results:** All studies showed that cabbage leaf compress decreased the frequency of breast engorgement in postpartum mothers. Cabbage leaf compress is a non-pharmacological solution that can be used by postpartum mothers independently to reduce their breast swelling. **Conclusions:** Giving cabbage leaf compress is effective in reducing the incidence of breast swelling in postpartum mothers

**Keywords :** Cabbage leaf, compress, breast engorgement

### Introduction

The puerperium, also known as the postpartum period, begins from the birth of the placenta until 42 days after delivery. During this time, the mother's body undergoes recovery or changes to her reproductive system due to her pre-pregnancy condition, as well as physiological and psychological changes, which contribute to the mother's ability to go through the puerperium smoothly. Lactation is one of the physical changes that occur during puerperium. During lactation, several hormones come into play, including prolactin and oxytocin. These hormones must be kept in balance so that the lactation process runs smoothly and the baby receives exclusive breastfeeding.

The amount of breast milk consumed by the baby determines the process of growth and development, this is the main basis for mothers to provide exclusive breastfeeding in the first 6 months of birth and continue until the next 24 months after birth. However, not all mothers can breastfeed normally due to many influencing factors, in line with the results of research which states that breastfeeding cannot always be normal, and only a few mothers complain of breast swelling as a result (Ariandini et al. 2023). Another study explained that mothers with protruding nipples are more likely to express milk smoothly compared to mothers with non-protruding nipples (closed and flat). Mothers with nipple problems usually feel incapable of breastfeeding and easily give up on breastmilk, which inhibits milk production. (Ekaputri, Ismed, and Afrika 2022).

The inhibition of breast milk production can be influenced by several factors, one of which is due to inadequate oxytocin production which triggers breast engorgement. Breast engorgement can be overcome with several alternative treatments, one of which is breast care, in line with the results of the literature review which explains that there is a relationship

between breast care and breast milk production, there is a relationship between anxiety and breast milk production, there is a relationship between infant suction factors and breast milk production and there is a relationship between maternal nutritional intake and breast milk production. (Yatsi Tangerang and Try Sumarni 2021). If breast engorgement is not treated properly, breast swelling will occur and will affect the growth and development of the baby.

According to Marmi in Rohmah (2019) Treatment of breast engorgement can be done pharmacologically and non-pharmacologically. Pharmacological treatment of breast engorgement can be given symptomatic therapy to reduce the pain (analgesics) such as paracetamol, ibuprofen. It can also be given lynoral tablets 3 times a day for 2-3 days to temporarily block milk production. To reduce non-pharmacological breast swelling can be done with acupuncture, traditional breast treatments (hot compresses combined with mastication), cabbage leaves, alternating hot and cold compression, cold compress, and ultrasound therapy.

Cabbage leaves have been used as a traditional remedy for a variety of diseases, one of which is to relieve swelling in the breasts in line with the results of research that explains that cabbage and breast care leaves compresses are effective in reducing breast swelling. (Sari and Putri 2020). Cabbage leaf compresses have been shown to reduce swelling in swollen parts of the body, using the body's natural response to the substances in the cabbage that are absorbed by the skin and the cold effects of the cabbage. It reduces the pain and swelling of the breasts. Based on this, there needs to be an analysis related to the picture of some non-pharmacological interventions (cabbage leaf compresses) that can help reduce swelling in the breasts.

## **Methods**

The method used is a literature review that analyzes cabbage leaf compresses can help reduce breast swelling in newborn mothers. After determining the research issues to be studied, the sources used to conduct this literature review are five scientific articles obtained through the Google Scholar database and published between 2020 and 2023. Next, do the analysis and associate it with the library review.

## **Results**

According to five literature reviews, there is a link between cabbage leaf compresses and swelling of the breast in the newly born mother.

**Tabel 1 Result Literature Review**

No	Author and Years	Title	Method	Purpose	Result
1	Yuhelva Destri, Meryn Agusti Rahmadani. 2021	Implementation of Compressed Breasts focuses on giving copper leaf compresses in Usmanalah City of Lampung PTMB in 2020 (Destri and Ramadhani 2021)	This research uses descriptive methods with a case study approach	To Give Pregnancy Assistance to Mrs. E 23 Thn 3 Days Postpartum Implementation of Swollen Breasts With Cabbage Leaf Compresses in PMB Usmanalah Saddam Bandar Lampung Year 2020.	Cabbage leaf compresses can deal with swollen breasts because the leaves of cabbage contain the amino acid methionine that acts as an antibiotic and other contents such as sinigrin (Allyl Isothiocyanate), mustard oil, magnesium, sulphur heterosis oxalate which can help widen capillary blood vessels thus enhancing blood flow to enter through the area and allowing the body to reabsorb the fluid embedded in the breasts.
2	Siti Rofi'ah Istu Putri Rahayu Nuril Nikmawati 2020	Red Cabbage and Shrimp Compresses Effectively Reduce Degrees of Swelling of Postpartum Mother's Breasts (Rofi'ah, Rahayu, and Nikmawati 2020)	This study uses experimental quasy studies, with pretest -posttest with control group design.	The aim of this study was to determine the effectiveness of the cabbage leaf compresses and the compression of red leaves against the degree of postpartum breast swelling.	The results of this study showed differences in the scale of swelling before and after the intervention in the experimental and control groups. Cabbage leaf compresses are more effective in reducing the degree of breast swelling compared to red crab leaves.
3	Ervi Damayanti, Dewi Ariani, Danik Agustin. 2020	Influence of Cold Cabbage Leaf Compresses as Auxiliary Milk Treatment on the Scale of Swelling and Intensity of Breast Pain and Milk Volume in Postpartum Mothers at RSUD Bangil . ( et al. 2020)	This study is Quasy Experimental with the design of the study pre test-post test with control group. Within this design there are two groups, namely the intervention group (given the method of cold cabbage leaf compresses and milk pear) and the control group (donated the Milk Pear method).	To find out the effect of cold cabbage leaf compresses on the scale of swelling and the intensity of chest pain, as well as the amount of breast milk in postpartum mothers with breast milking.	There were significant differences in both groups in decreasing the swelling scale and the intensity of pain, but in increasing the amount of breastfeeding did not show any significant difference between the two groups.
4	Sri Utari, Nurulistiyawan Tri Purnanto. 2021	Effects of Cabbage Leaf Compresses (Brassica Oleracea Var.Capitata) on Mother Nifas with Breast Pain.	This study uses a descriptive research method with a case study. The instruments used in this study	To find out the effect of cabbage leaf compresses on mothers who breathe with breast pain due to breast	There's a decrease of the pain scale 5 to the scale of pain 0. (tidak nyeri). Cabbage leaf compresses can relieve the pain in the breastbone in Nifas Mother

	(Utari and Purwanto 2021)	use a seven-step varney adoption and development records using subjective, objective, data analysis, and implementation (SOAP)	milking.	because the cabbage is rich in sulfur content that is believed to reduce swelling and breast inflammation.	
5	Sri Dewi Haryati, Desi Ernita Amru, Larince Radulima Febrianti, Hazen Aziz. 2023	Impact of Cabbage Leaf Compresses in Overcoming Asi Dam on Mother Nifas. (Haryati et al. 2023)	This type of research is potentiative with the method of taking case studies carried out with problem research through a case y ang consisting of a single unit.	to give orphanage to mothers who suffer from breastfeeding with the administration of cabbage leaf compresses to reduce the swelling and pain that mothers feel.	It has been concluded that cabbage leaf compresses can ease the swelling and relieve the pain in the milk pond.

## Discussion

According to Destri, *et al* (2021) the evaluation of the orphanage in the case of Mrs. E with swollen breasts was conducted from July 7th to July 10th 2020. The results were obtained. Mother already understood the results of the examination, Mother understands the complaints that she felt, Mom already understands about breast care, I already understand about how to give cabbage leaf compresses, I understand about keeping personal hygiene, Mom understands and has breastfed on demand, I have consumed nutritious food, Mom has welcomed her sleep breaks, I've made a re-visit to give orphans. After being given orphanage for four days, Mom's breasts are no longer swollen.

According to Rofi'ah, *et al* (2020) research results show that there are differences in the scale of swelling before and after intervention in the experimental and control groups. Cabbage leaf compress with. According to Damayanti, *et al* (2020), cold cabbage leaf compresses can be used as a therapy to reduce the scale of swelling and the intensity of chest pain in mothers suffering from breastfeeding. Research results show that with a p-value of each 0,000 ( $\alpha < 0,005$ ), the compression of cold cobbage leaves contributes to an increase in the number of breastfeeds as well as a decrease in the scope of swell and intense breast pain.

According to Utari, *et al* (2021) the results of the evaluation of pregnancy management that has been carried out on Mrs. D for 4 days obtained results occurred a decrease of the pain scale 5 to the scale of pain 0 (no pain). According to Haryati, *et al* (2023), the orphanage is given by the administration of cabbage leaf compresses for 3 days every 6 hours once with a compression time of 30 minutes. It was concluded that cabbage leaf compresses can cope with swelling and relieve pain in the milk pond.

Based on several journals that have been studied, the administration of cabbage leaf compresses is effective in reducing the incidence of breast swelling in postpartum mothers. Cabbage has antibiotic and anti-inflammatory properties because it contains allylisothiocyanate, rapine, mustard oil, magnesium, and sulfur that can help enlarge the capillary blood vessels, thereby increasing the flow of blood to the area, and enabling the body to reabsorb the fluid embedded in the breast (Rahayu and Wulandari 2020). According to the results of a study that explains that the administration of cabbage leaf compresses (*brassica oleracea*) is effective against the scale of reduction in breast swelling in postpartum mothers (Rohmah, Wulandari, and Sihotang 2019).

Another study explains that the cabbage leaf substance will trigger the enzyme glutathione in the cytoplasm to dissolve the blockage in the milk tract so that the body can reabsorb the fluid that is hooked in the breasts. The cabbage leaf content can also help reduce local inflammation. In addition, this substance drives the hypothalamus to initiate the effector system responsible for vasodilating the capillary blood vessels. As a result, the outflow of blood into the blocked area increases, allowing milk to leave the breast more easily (Napisah *et al.*, 2021).

Cabbage leaf compression interventions are effective in reducing breast swelling and decreasing the scale of swelling if cabbage-leaf compressing interventions on swollen breasts are performed for 15-20 minutes by leaving it in a bra. The treatment can be done 2 times a day for 3 days in a row. According to a study that explains that there is an influence between the compresses of cabbage leaves on the swelling of the breasts (Astuti and Anggarawati 2019). The results of another study explained that cabbage leaf compresses can relieve the hardness of breast swelling and have a better effect. Cabbage sheet compress can be recommended to post-natal mothers to deal with breast swellings (Rahmisyah and Ristiani 2023).

Other literature review results explained that there were differences and decreases before and after cabbage leaf compresses, most mothers who suffered from breast swelling experienced a decrease in the scale of the swelling of the breasts after routine cabbages, which means that cough leaves compression was effective and effective in dealing with the postpartum mother's swelling (Yudi *et al.*, 2023).

## Conclusion

According to five journals of articles studied, it was found that there were differences and decreases in the size of breast swelling before and after cabbage leaf compression. This suggests that regular cabbages are effective and efficient in dealing with breast swell in postpartum mothers.

## References

- Ariandini, Shanti, Meti Kusmiati, Nina Yusnia, and Ayu Rahmawati. 2023. "Faktor-Faktor Yang Mempengaruhi Bendungan ASI Pada Ibu Nifas." *Journal of Public Health Innovation* 3(02):157–63. doi: 10.34305/jphi.v3i02.717.
- Astuti, Yuni, and Tuti Anggarawati. 2019. "Pengaruh Kompres Kubis Terhadap Breast Engorgement Ibu Postpartum Sectio Caesarea." *Indonesian Journal of Nursing Research (IJNR)* 2(1). doi: 10.35473/ijnr.v2i1.232.
- Ervi Damayanti, Dewi Ariani, and Danik Agustin. 2020. "Pengaruh Pemberian Kompres Daun Kubis Dingin Sebagai Terapi Pendamping Bendungan ASI Terhadap Skala Pembengkakan Dan Intensitas Nyeri Payudara Serta Jumlah ASI pada Ibu Postpartum Di RSUD Bangil." *Journal of Issues in Midwifery* 4(2):54–66. doi: 10.21776/ub.joim.2020.004.02.1.
- Destri, Yuhelva, and Meryn Agusti Ramadhani. 2021. "Penatalaksanaan Payudara Bengkak Perfokus Pada Pemberian Kompres Daun Kubis Di Pmb Usmalanah Saddam Bandar Lampung Tahun 2020." *JIK (Jurnal Ilmu Kebidanan)* 5(2):241–48.
- Ekaputri, Rahmawati, Syarifah Ismed, and Eka Afrika. 2022. "Faktor-Faktor Yang Mempengaruhi Pengeluaran ASI Pada Ibu Postpartum Di Wilayah Kerja Puskesmas Tanjung Agung Kecamatan Tanjung Agung Kabupaten Muara Enim Tahun 2021." *Jurnal Ilmiah Universitas Batanghari Jambi* 22(2):753–57.

- Haryati, Sri Dewi, Desi Ernita Amru, Larince Radulima Febrianti, and Hazen Aziz. 2023. "Pengaruh Pemberian Kompres Daun Kubis Dalam Mengatasi Bendungan Asi Pada Ibu Nifas." *HealthCaring: Jurnal Ilmiah Kesehatan* 2(1):36–41. doi: 10.58794/jubida.v1i2.211.
- Napisah, Pipih, Restuning Widiasih, Ida Maryati, Yanti Hermayanti, and Windy Natasya. 2021. "The Effectiveness of Cabbage Leaf Compress and the Education of Lactation Management in Reducing Breast Engorgement in Postpartum." *Open Access Macedonian Journal of Medical Sciences* 9(T6):106–10. doi: 10.3889/oamjms.2021.7318.
- Rahayu, H. S., and E. T. Wulandari. 2020. "Perbandingan Efektivitas Kompres Air Hangat Dan Kompres Daun Kol Untuk Mengurangi Nyeri Pada Ibu Dengan Pembengkakan Payudara Di Wilayah Kerja ...." *Jurnal Maternitas ...* 1(3):150–57.
- Rahmisyah, Rahmisyah, and Ristiani Ristiani. 2023. "Pengaruh Kompres Daun Kol Terhadap Pembengkakan Payudara Pada Ibu Post Partum." *Jurnal Kesehatan Tambusai* 4(3):2248–54. doi: 10.31004/jkt.v4i3.17131.
- Rofi'ah, Siti, Istu Putri Rahayu, and Nuril Nikmawati. 2020. "Kompres Kubis Dan Sirih Merah Efektif Menurunkan Derajat Pembengkakan Payudaya Ibu Postpartum." *Jurnal Jendela Inovasi Daerah* 3(1):1–15.
- Rohmah, Miftakhur, Anggrawati Wulandari, and Deny Wati Sihotang. 2019. "Efektivitas Kompres Daun Kubis (Brassica Oleracea) Terhadap Skala Pembengkakan Payudara Pada Ibu Post Partum Di PMB Endang Kota Kediri." *Journal for Quality in Women's Health* 2(2):23–30. doi: 10.30994/jqwh.v2i2.34.
- Sari, Vitria Komala, and Riska Nelda Putri. 2020. "Efektivitas Kompres Daun Kubis Dan Breast Care Terhadap Pengurangan Pembengkakan Payudara Pada Ibu Nifas." *Maternal Child Health Care* 2(2):308. doi: 10.32883/mchc.v2i2.1044.
- Utari, Sri, and Nurulistyawan Tri Purwanto. 2021. "Pengaruh Pemberian Kompres Daun Kubis (Brassica Oleracea Var.Capitata) Pada Ibu Nifas Dengan Nyeri Bendungan Asi." *E-Journal Prwodadi* 6(2):48–55.
- Yatsi Tangerang, STIKes, and Deswyta Try Sumarni. 2021. "Faktor-Faktor Yang Mempengaruhi Pengeluaran ASI Pada Ibu Postpartum: Literatur Review." *Journal for Quality in Women's Health* 4(1):18–20. doi: 10.30994/jqwh.v4i1.100.
- Yudi, Elpina Ripka, Liya Ishlahul Afiyah, Elis Widyawati, and Anisa Indarti. 2023. "Literature Review: Pengaruh Pemberian Kompres Daun Kubis Terhadap Pembengkakan Payudara Pada Ibu Post Partum." 2(1):341–49.