



**EFFECTIVENESS OF CABBAGE LEAVES APPLICATION ON BREAST ENGORGEMENT AMONG POSTNATAL MOTHERS AT KARPAGA VINAYAGA INSTITUTE OF MEDICAL SCIENCES AND RESEARCH CENTRE, MADURANTHAGAM TALUK IN KANCHEEPURAM DISTRICT.**

**Dr. (Mrs). T. Komalavalli.**

M.Sc(N).,Ph.D Dept Of Child Health Nursing ,principal ,karpaga Vinayaga College Of Nursing Kancheepuram Dt Tamilnadu

**Mrs. P. Narmada\***

M.Sc(N) Asst. Prof Dept. Of Obstetrical And Gynaecological Nursing Karpaga Vinayaga College Of Nursing, Kancheepuram Dt Tamilnadu  
\*Corresponding Author

**Mrs. R. Mohana**

M.Sc(N) Prof Dept. Of Obstetrical And Gynaecological Nursing Karpaga Vinayaga College Of Nursing, Kancheepuram Dt Tamilnadu

### ABSTRACT

**BACKGROUND:** This normal breast fullness can develop into engorgement if the baby is not nursing often enough or vigorously enough, or if mother is separated from her baby. When the normal breast fullness is not relieved, fluid builds up and swelling occurs. The breasts become hard and the skin is taut and shiny. They become extremely tender and painful, and low-grade fever. Swelling may extend into the area under the arms, and in very severe cases can cause numbness or tingling of hands from pressure on nerves.

**OBJECTIVES:** 1) To assess the severity of breast engorgement in the pre-test among experimental and control group. 2) To compare the pre test and the post test findings on breast engorgement within experimental and control group. 3) To compare the post test findings on breast engorgement between experimental and control group. 4) To associate the selected demographic variables and obstetrical variables with the severity of breast engorgement among experimental and control group.

**METHODS** The research approach adopted for the study was quantitative approach. The research design applied to this study was quasi experimental design pre and post test with control group. The study was conducted at Karpaga Vinayaga Institute of Medical Sciences and Research Centre, Maduranthagam Taluk in Kancheepuram District. In the present study, sample consisted of 60 post natal mothers who were having breast engorgement. The sample size was 60, out of which 30 were in experimental group and 30 were in control group. Purposive sampling technique was adopted for the study. Modified six point breast engorgement scale was used to assess the effectiveness of cabbage leaves application on breast engorgement among post natal mothers. The following tools were used in the study are Demographic variable, Obstetrical variable, Modified six point breast engorgement scale, Application of cabbage leaves for breast engorgement

**RESULTS** In the pre test among experimental group 18 (60.00%) and 12 (40.00%) of the post natal mothers had severe and moderate breast engorgement where as in the control group 19 (63.33%) and 11 (36.7%) of the post natal mothers had severe and moderate engorgement. In the post test among experimental group 27 (90.00%) and 3 (10.00%) mothers had mild and no engorgement, whereas in the control group 15 (50.00%) and 15 (50.00%) mothers had severe and moderate engorgement. The comparison of pre and post test scores on breast engorgement within experimental group that the paired 't' value was 19.51, which was statistically significant at level of  $p < 0.05$ . The comparison of pre and post test scores on breast engorgement within control group disclosed that the paired 't' value was 1.44 which was not statistically significant at the level of  $p < 0.05$ . The comparison of both experimental and control group revealed that the 't' value was 14.77 which was significant at the level of  $p < 0.05$ . Cabbage leaves were effective in reducing the level of breast engorgement among post natal mothers. The study results revealed that the breast engorgement among post natal mothers elicited a considerable reduction in breast engorgement after nursing intervention.

**KEYWORDS :** Breast engorgement, post natal mothers, cabbage leaves application, effectiveness.

### INTRODUCTION

Motherhood - The only act that manifests in human form the cosmic wonder of creation. Child birth is a process beautifully designed by nature and the care following the birth of the baby is essential for the maintenance of health for both mother and child. Child birth is a transcendent event with meaning far beyond the actual physiologic process. The main vital considerations for the infants in tropical countries are breast feeding and avoidance of infection. Breast milk is the food of choice for infants. Breast feeding offers many advantages such as nutritional, immunologic and psychological.

This normal breast fullness can develop into engorgement if the baby is not nursing often enough or vigorously enough, or if mother is separated from her baby. When the normal breast fullness is not relieved, fluid builds up and swelling occurs. The breasts become hard and the skin is taut and shiny. They become extremely tender and painful, and low-grade fever. Swelling may extend into the area under the arms, and in very severe cases can cause numbness or tingling of hands from pressure on nerves. Because the breast is so full and swollen, the nipple and areola may flatten out (sort of like a water balloon) making the tissue difficult for the baby to grasp

### STATEMENT OF THE PROBLEM

A study to assess the effectiveness of cabbage leaves application on breast engorgement among postnatal mothers at Karpaga Vinayaga Institute of Medical Sciences and Research Centre, Maduranthagam Taluk in Kancheepuram District.

### OBJECTIVES OF THE STUDY

1. To assess the severity of breast engorgement in the pre-test among experimental and control group.
2. To compare the pre test and the post test findings on breast engorgement within experimental and control group.
3. To compare the post test findings on breast engorgement between experimental and control group.
4. To associate the selected demographic variables and obstetrical variables with the severity of breast engorgement among experimental and control group.

### METHODOLOGY

The research approach adopted for the study was quantitative approach. The research design applied to this study was quasi experimental design pre and post test with control group. Study subjects were non-randomly assigned to experimental

and control groups. The study was conducted at Karpaga Vinayaga Institute of Medical Sciences and Research Centre, Maduranthagam Taluk in Kancheepuram District. In the present study, sample consisted of 60 post natal mothers who were having breast engorgement and fulfilled the inclusive criteria. The sample size was 60, out of which 30 were in experimental group and 30 were in control group. Purposive sampling technique was adopted for the study. The researcher selected the sample who fulfills inclusive criteria. Modified six point breast engorgement scale was used to assess the effectiveness of cabbage leaves application on breast engorgement among post natal mothers at Karpaga Vinayaga Institute of Medical Sciences and Research Centre. A thorough review of literature, suggestions from guide and experts helped in the selection of content for developing the tool.

**DEVELOPMENT AND DESCRIPTION OF THE TOOL**

**TOOL – I**

This section deals with Section A and Section B

**SECTION A**

**1. Demographic variables**

It comprised of 6 items which includes age, education, occupation, religion, locality, source of information.

**SECTION B**

**2. Obstetrical variables**

It comprised of 4 items regarding the obstetrical information of the post natal mothers such as obstetrical score, mode of delivery, and initiation of breast feeding, number of feedings per day.

**TOOL II**

This section deals with Section C and Section D

**SECTION C**

**1. Modified six point breast engorgement scale**

It consists of 7 items to assess the level of breast engorgement. Each item was rated on 6 point scale, score from 0 to 6. Each subject was assessed by using this scale and the score were noted.

The scoring systems were divided into the following categories:

- 0 - No engorgement
- 1-2 - Mild engorgement
- 3-4 - Moderate engorgement
- 5-6 - severe engorgement

**SECTION-D**

**4. Application of cabbage leaves for breast engorgement**

Explain the procedure to the mother and provide privacy and get the consent from the mother. Arrange the articles near to the bed side of the mother. After washing the hands, positioning the patient in sitting or semi fowlers position. Select fresh cabbage and remove the first two layers and select the third layer. Wash the leaves thoroughly and crush or remove upper border of the prominent veins from the cabbage leaves. Making a hole at the centre of cabbage leaves. Place the leaves on the engorged breast by exposing nipple and wrapped the cabbage leaves against the breast with bra. Continue the procedure for 20-30 min (if cabbage leaves become wilt, remove the leaves and reapply fresh leaves). Remove the leaves from breasts after the procedure completed. The above procedure was repeated after 4 hours for the same mothers.

**DATA COLLECTION PROCEDURE**

The data was collected from each sample were as follows. The samples were selected by using purposive sampling technique and allocated the samples on alternative days to experimental and control group. The data collection was done

from 15.6.2013 to 27.7.2013. First the demographic and obstetrical data was collected by interview method. In the pretest the investigator assessed the level of breast engorgement using modified six point breast engorgement scale in both the groups. For the experimental group, the superficial veins of the cabbage leaves were cut and it was applied on the breasts for the post natal mothers for 20-30 minutes at 4 hrs of interval 2 times a day subsequently. After the intervention the post test was assessed. Data were planned to analyze on the basis of objectives and testing of hypothesis by using descriptive and inferential statistics.

**Table 1 Comparison of breast engorgement within experimental group**

**N=60**

S. No	Breast engorgement	Mean	S.D	Paired 't' value	P value
1	Pre test	4.70	0.92	19.51***	0.000
2	Post test	1.23	0.63		

\*\*\* Significant at p < (0.001)

There was a significant difference in the levels of breast engorgement within the experimental group which was significant at level of p < 0.001. It means that application of cabbage leaves were highly effective among post natal mothers to relieve breast engorgement

**Table2: Comparison of breast engorgement within control group**

**N=60**

S.No	Breast engorgement	Mean	S.D	Paired 't' value	P value
1	Pretest	4.70	1.02	1.44 (NS)	0.161
2.	Post test	4.63	1.10		

**NS - Not significant** .There was no statistically significant difference in the levels of breast engorgement within the control group.

**RESULTS**

In the pre test among experimental group 18 (60.00%) and 12(40.00%) of the post natal mothers had severe and moderate breast engorgement where as in the control group 19(63.33%) and 11(36.7%) of the post natal mothers had severe and moderate engorgement.

- In the post test among experimental group 27(90.00%) and 3(10.00%) mothers had mild and no engorgement, whereas in the control group 15 (50.00%) and 15 (50.00%) mothers had severe and moderate engorgement.
- The comparison of pre and post test scores on breast engorgement within experimental group that the paired 't' value was 19.51, which was statistically significant at level of p < 0.05.
- The comparison of pre and post test scores on breast engorgement within control group disclosed that the paired 't' value was 1.44 which was not statistically significant at the level of p < 0.05.
- The comparison of both experimental and control group revealed that the 't' value was 14.77 which was significant at the level of p < 0.05.
- There were no statistically association demographic and obstetrical variables among post natal mothers with breast engorgement in the experimental group except with religion which was statistically significant at the level of p < 0.05.
- There was no statistically significant association of demographic and obstetrical variables among post natal mothers with breast engorgement in the control group except locality, source of information which was statistically significant at level of p < 0.05.

Cabbage leaves were effective in reducing the level of breast engorgement among post natal mothers. The breast engorgement among post natal mothers elicited a considerable reduction in breast engorgement after nursing intervention.

### RECOMMENDATIONS

Based on the findings of the study the following recommendations have made for the study

- A study can be carried out to evaluate the various treatment modalities for breast engorgement.
- A large scale study can be carried out to generalize the findings.
- A similar study can be conducted to community setting.

### REFERENCES

1. Abdulla, F.G. and Levine, (1986). Better Nursing Care through Nursing research. London: MacMillion Company.
2. Annamma Jacob, (2005). A comprehensive Text book of Midwifery. New Delhi: Jaypee Brothers Medical Publishers.
3. Basvanthappa, B.T., (2013). Text Book of Nursing Research. New Delhi; Jaypee Brothers Medical Publishers.
4. Bobak, M.I. and Lowdermilk, L.D. (1991). Maternity Nursing. Mosby Publication.
5. Brunner and Siddarth. (1992). Text Book of Medical Surgical Nursing. J.B. Lippincott Publication.
6. Burns, N. and Groove. S.K., (1995). Understanding Nursing Research. Philadelphia: Harcourt Publishers.
7. Diane, (2009). Margret text book of midwifery. London: Churchill livingstone.
8. Dutta.D.C.,(2006). Text book of obstetrics including perinatology and contraception. Calcutta: New Central Book Agency (P) Ltd.
9. Julia, B. and George. (1990). Nursing Theories - The Bare Professional Practice. Connecticut Publications.
10. Kothari, C.R. (1996). Research Methodology: Methods and Techniques. New Age Publishers.

### JOURNALS

11. Ann Marrie Widstrom. (2007). Early Initiation of breast feeding. Journal of obstetrics and Gynecological Nursing. 49(4), 16-19.
12. Arora, S., Vatsa, M. and Dadhwal .V.(2008, July). A Comparison of Cabbage Leaves vs. Hot and Cold Compresses in the Treatment of Breast Engorgement. Indian J Community Med. 33(3), 160-2.
13. Arora Smriti. (2008, July). Comparison of cabbage leaves vs hot and cold compresses on treatment of breast engorgement. Indian Journal of community medicine. 33(3)160-162.
14. Ayers, et al., (2010). Ingredients of cabbage leaves. Journal of human lactation. 24(5), 56-58.
15. Batul Nafisa. (2011). Occurrence of breast engorgement. 32(6), 202-208.
16. Becky Flora. (2004). IBCLC. Prevention and treatment of engorgement. 89-93