Effectiveness of cabbage leaves application on breast engorgement.

KEYWORDS
effectiveness, engorgement, cabbage leaves, primipara mothers

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ABSTRACT
Objectives: To assess the breast engorgement before the application of cabbage leaves in both experimental and control group. To compare the effectiveness of cabbage leaves application on breast engorgement. To find the association between the effectiveness of cabbage leaves application on breast engorgement of experimental group postnatal mothers with their demographic variables. Methods: Quasi experimental approach, pre and post test design was adopted. Non probability purposive sampling technique was used. Pre intervention test was done to assess the engorgement level. Analysis: The pre interventional engorgement mean value in experimental group was 8.2 ± 2.167 and in control group value was 8.60±2.01. The post interventional mean value of experimental group is 3±1.261 and the mean value of control group 1.552 ±0.552 the t value obtained was 10.177 which is statistically significant at p<0.001. Conclusion: The study findings revealed that the cabbage leaves application was effective in control of breast engorgement.

INTRODUCTION
The birth of a baby is an important event in any family. It is therefore important for a mother to have a healthy baby. She gives her baby the best nutrition in the form of breast milk. Breast milk is a highly specialized complex fluid which is uniquely suited to the needs. Breast feeding is not only healthier, but it is a moment of love also, in which the baby leans to bond, smell, and care his/ her mother as she gives nourishment and affection. It is the most cost effective, health promotion and disease prevention activity. (WHO, UNICEF).

The common breast complications in puerperium are: breast engorgement, cracked and retracted nipple leading to difficult in breast feeding, mastitis or breast abscess and lactation failure. Breast engorgement and infection are responsible for puerperal Pyrexiativities of a growing infant. Breast engorgement is a common physiological problem for lactating mothers it occurs in the mammary gland it is defined as congestion and distension with fluid. The lactation literature defines as sudden increase in the volume of the breast milk due to lymphatic and vascular congestion with interstitial edema during the first two weeks following the birth.

NEED FOR THE STUDY
Engorgement is a well known but poorly researched aspect of lactation. The investigator during her clinical experiences in the maternity ward found that the primi postnatal mother were ignorant, about breast feeding that lead to the engorgement of the breast. The mothers were receiving Pharmacological and non-pharmacological methods like expression of breast milk, using of breast Pump binder, nipple shield, hot and cold application. These methods were costly and causing pain to mother. So, the investigator felt that natural therapy can be advised to the mothers in low cost which can be used easily even at home without guidance. But few researches have been conducted to monitor the effectiveness of cabbage leaves on breast engorgement. This made the researcher to review the literature and find ways of relies on the statement.

STATEMNT OF THE PROBLEM
“A study to assess the effectiveness of cabbage leaves application on breast engorgement among the primipara mother in GMH at Tirupati.”

Objectives of the study
- To assess the breast engorgement before the application of cabbage leaves in both experimental and control group primiparous mothers.
- To compare the effectiveness of cabbage leaves application on breast engorgement among experimental and control group mothers.
- To find the association between the effectiveness of cabbage leaves application on breast engorgement of experimental group postnatal mothers with their demographic variables.

REVIEW OF LITERATURE
A Ruba (2009) has conducted a quasi experimental study on effectiveness of cabbage leaf in treatment of breast engorgement. 24 mothers participated, 12 in experimental group received cabbage leaves and application and 12 were received routine care. The study results shows that experimental after applied mean (4.067, t: 2.87, p: 31.05), control group mean value was (26.067, 15.07). Statistical proved experimental group has significant. This study concluded the cabbage leave application has great improvement in treating the condition

CONCEPTUAL FRAMEWORK
Modified Wiedenbach’s Helping Art of Clinical Nursing Theory was adopted for the study. This is a prescriptive theory which directs action towards an explicit goal.

METHODOLOGY
Research approach: Quasi experimental approach.
Research Design: Pre test – post test design.
Setting of the study: The study was conducted in the postnatal ward of Government Maternity Hospital, Tirupati.
Population: Primipara mothers who had breast engorgement and underwent normal vagina delivery.
Sample: 40 mothers (20 primi para mother in experimental groups, 20 in control group), who fulfill inclusion criteria.

Sampling techniques: Non probability, purposive sampling technique.

VARIABLES:

Independent variable: Cabbage leave application is the independent variable in the study.

Dependent variable: The level of breast engorgement & pain perceived by the primi parous mother are the dependent variable.

CRITERIA FOR SAMPLE SELECTION:

Inclusive criteria:
- Who had normal vaginal delivery with breast engorgement
- Primipara mother with breast engorgement
- Mothers who are not willing to give breast milk
- Mothers with indication of lactation suppression

Exclusive criteria:
- Multi para mothers.
- Primipara mothers with breast complication such as cracked nipple, mastitis, breast abscess.

DEVELOPMENT & DESCRIPTION OF TOOL:
The tool used in the study was consisting 4 sections Section-I, contains identification Data, Section-II contains obstetrical history, Section-III contains neonatal Profile, Section-IV contains checklist for assessment of breast engorgement and visual analogue scale to assess pain.

Section A:
Consists of demographic characteristics which include name, age, marital status, religion, education of the mother, type of family, residence, and family monthly income in rupees.

Section B:
Consist of obstetrical history include gravida, postpartum day, nature of delivery, type of nipple.

Section C:
Consist of neonatal profile include age of newborn, sex of the baby gestational age, weight of new born, apgar score, reflexes, initiation of breast feeding, type of feeding and incase of IUD, cause for IUD, age of dead fetus.

Section D:
Consist of a 12 point check list to assess the level of breast engorgement.

The checklist was graded as 1 if the symptoms were present and as 0 if the were absent. Based on engorgement severity t is categorized as follows:

1-4: Mild engorgement 5-8: Moderate engorgement, 9-12: Severe engorgement

Visual Analogue Scale was used to assess pain level of engorged breast before and after application of cabbage leaves.

DATA COLLECTION PROCEDURE & ANALYSIS
The actual study was done on 40 samples with 20 samples in experimental group (Cabbage leave application) and 20 in control group (Routine Care) falling under inclusion criteria after getting written consent.

To the experimental group of patients cabbage leaves were applied for 15-20 minutes (3 times in 24 hours) and control group receives the routine care. The collected data was analyzed by using descriptive and inferential statistics. The findings of study revealed that the cabbage leaves application was effective on control of breast engorgement. The association of demographic variable with effect of cabbage leaves application was determined by using chi-square test which revealed that there was a significant association with regard to the research major findings.

Major Findings
- The first objective of the study was to assess the breast engorgement before the application of cabbage leaves in both experimental & control group primiparous mothers.

It is observed that before the intervention 10 (50%) woman in experimental group and 11 (55%) in control group had severe engorgement while 8 (40%) each in both experimental and control group had moderate breast engorgement and only 2 in experimental group and 1 in control group had mild breast engorgement. After application of cabbage leaves (post intervention) 15 (75%) in experimental group and 1 (5%) in control group had mild breast engorgement. Application of cabbage leaves (post intervention) 15 (75%) in experimental group and 1 (5%) in control group had mild breast engorgement, followed by 5 (25%) in experimental group and 11 (55%) in control group had moderate breast engorgement and none in experimental group and 8 in control group had severe breast engorgement so it is concluded that there is significant difference in levels of breast engorgement before and after application of cabbage leaves.

The engorgement mean value before application of cabbage leave application in experimental group was $8.2 \pm 2.167$ and in control group mean value was $8.60 \pm 2.01$, and pain level in experimental group was mean was $8.7$, SD, $0.57$, and in control group $9.3$ SD was $0.5712$.

The second objectives of study was to compare the effectiveness of cabbage leaves application on breast engorgement among experimental and control group mothers.

It is observed that experimental group pre interventional means is $8.2 \pm 2.167$ and post interventional mean was $3.7 \pm 1.261$ and the ‘t’ value obtained was $13.7$ which is significant at $p<0.01$ while control group pre intervention mean and $8.6 \pm 0.45$ and post interventional mean was $8.24 \pm 0.347$ and ‘t’ value obtained was $8.24 \pm 0.347$ which is not significant.

COMPARISON OF EFFECT OF CABBAGE LEAVES ON EXPERIMENTAL AND CONTROL GROUP
Comparison of the effect of cabbage leaves application on breast engorgement in experimental and control group of primi parous mother.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>'t' Value</th>
<th>'p' value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre interventional</td>
<td>8.2</td>
<td>2.16</td>
<td>8.6</td>
<td>0.45</td>
<td>0.605</td>
<td>0.54 NS</td>
</tr>
<tr>
<td>Post Intervenional</td>
<td>3.7</td>
<td>1.26</td>
<td>1.55</td>
<td>0.282</td>
<td>16.117***</td>
<td></td>
</tr>
</tbody>
</table>
Reveals that comparative effect of cabbage leaves application in breast engorgement in both group. The result shows that the pre interventional mean of experimental group is $8.2 \pm 2.167$ and means value of control group is $8.6 \pm 2.01$. The ‘t’ value obtained was 0.605 which was not statistically significant.

The post interventional mean value of experimental group is $3 \pm 1.261$ and the mean value of control group $1.552 \pm 0.552$ the ‘t’ value obtained was 10.177 which was statistically significant at $p<0.001$.

The third objectives was to find out the association between the effect of cabbage leaves on breast engorgement experimental group of post natal mother with their demographic variable in experimental group by using $\chi^2$. The $\chi^2$ value of residence was $7.429$, $t; 0.24$, and in gravid of mother. Value is $5.93$, $t; 0.15$ is significant at 1% level , indicates that there was significant association with their demographic variables.

CONCLUSION:
The study findings revealed that the cabbage leaves application was effective in control of breast engorgement. So the study concluded that the cabbage leaves can be used as folk remedy and natural therapy for relieving breast engorgement, though breast engorgement can be curable in advance stage by promoting proper positioning, massaging, hot and cold application.

IMPLICATIONS:
The study findings had thrown new light on implication of the future. It has the implications in the areas of nursing service, nursing education, nursing administration and nursing research.

Nursing Education:
• In nursing students, should be enlightened with adequate knowledge on assessment of breast engorgement and non pharmacological method for relieving breast engorgement.

• Cabbage leaves application for breast engorgement can be included as

• Nursing procedure to provide care to postnatal mother with breast engorgement. Nursing students and public health nurses must be trained regarding cabbage leave application procedure on breast engorgement and also.

Nursing Administration:
• The nurse administrator should place emphasis on disseminating information related to assessment of breast engorgement and their management in the postnatal wards of the hospital.

• The nurse administrator should provide necessary resources for the nursing personnel to implement various other non pharmacological interventions for effective relief of breast engorgement.

• The nurse administrator must initiate the midwives to practice the Cabbage leaves application to relieve engorgement by conducting in-service education programmes.

The administrator should provide ethical clearance for evidence based nursing research pertaining the use of cabbage leaves application on control of breast engorgement.

Nursing Practice:
Nurses and midwives are to be trained regarding various non-pharmacological methods to relieve breast engorgement

Recommendation:
• Offered for further research to include a similar study to be replicated with large sample.

• A comparative study can be conducted to determine the effectiveness of cabbage leaves application and cold compresses.

• A comparative study can be conducted to determine the effectiveness chilled and room temperature cabbage leaves in treating breast engorgement.

REFERENCE