

Research Article

“Effectiveness Of Cabbage Leaves Fomentation On Pain And Discomfort During Breast Engorgement Among Postnatal Mothers– A Pre-Experimental Study.”

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ABSTRACT

Introduction: Breast engorgement is one of the most common breast complications that occur mainly on third or fourth post partum day. It is a painful condition that affects large number of postnatal mothers. Cabbage leaf fomentation is a natural way of treating breast engorgement, which reduces maternal morbidity and helps to improve lactation.

Objective: Study was aimed to assess the effectiveness of cabbage leaves fomentation on pain and discomfort during breast engorgement among postnatal mothers

Methodology: 50 postnatal mothers with breast engorgement were selected through convenience sampling technique. Numerical pain scale, Discomfort rating scale including Demographic Performa was used for the data collection and the collected data was analyzed with the descriptive and inferential statistics.

Result: The study revealed during pre-test 76.7% of the participants had severe pain and 23.3% had moderate pain and during post test after the intervention 73.3% of the participants had no pain and 26.7% of the participants had mild pain with the Mean difference of 7.46. It shows that the cabbage leaf fomentation is effective in reducing pain of breast engorgement among postnatal mothers ($p < 0.01$). During pre test 50% of the participants had severe discomfort and 50% had moderate discomfort and during post test 83.3% of the participants had mild discomfort and 16.7% of the participants had moderate discomfort with the mean difference of 28.06. It shows that the cabbage leaf fomentation is effective in reducing discomfort of breast engorgement among postnatal mothers ($p < 0.01$).

Conclusion: The study finding revealed that cabbage leaves application was effective in reducing pain and discomfort during breast engorgement.

Keywords: Cabbage leaves fomentation, Breast engorgement, Pain and Discomfort, Postnatal mothers.

INTRODUCTION

Background of the study

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“EFFECTIVENESS OF CABBAGE LEAVES FOMENTATION ON PAIN AND DISCOMFORT DURING BREAST ENGORGEMENT AMONG POSTNATAL MOTHERS– A PRE-EXPERIMENTAL STUDY.”

Breast engorgement is a postnatal physiological unpleasant condition in which painful swelling, redness and hardness of the breast is there due to sudden increase in milk volume lymphatic and vascular congestion and interstitial edema during a time when mother are coping with the demand of a new baby.^[1]

Breast engorgement and infection are responsible for puerperal pyrexia of a growing infant. Breast engorgement is a common physiological problem for lactating mothers it occurs in the mammary gland.

“**Mrs. Chaithanya Prashanth**” 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.^[2]

Many non-pharmacological intervention are used to relieve breast engorgement use of chilled cabbage is one of them. This is natural ways of treating and reduce maternal morbidity and help to improve lactation.^[1]

Cabbage contains sulphur which act as an antibiotic and anti-irritant which in turn draws an extra flow of blood to the area. This dilates the capillaries and acts as a counter irritant, thus relieving the engorgement and inflammation and allowing milk to flow freely.^[3]

Breast engorgement occurs in the mammary glands due to expansion and pressure exerted by the synthesis and storage of breast milk. Engorgement usually happens when the breasts switch from colostrum to mature milk.^[3]

AIIMS (2014) had conducted study to assess and compare the efficacy of cold cabbage leaves and hot application in the treatment of breast engorgement. The study comprises of total 60 mothers 30 in experimental group and 30 in the control group. The control group received cold cabbage leaf for relieving breast engorgement. Both the treatment i.e., hot applications were effective in decreasing breast engorgement and pain in postnatal mothers [$p < 0.001$]. Cold cabbage leaves and hot application were both effective in decreasing breast engorgement [$p = 0.07$].

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. In the second and third week of postpartum mastitis is common and mostly in the first 12 weeks 74% to 95% of cases occur. However, it may develop at any stage of lactation, including in the second year. Mastitis and breast abscess occur in all populations and in any stage of lactation which reported that 33% of lactating women were having mastitis.^[8]

Breast engorgement is painful condition developed by buildup of breast milk during breastfeeding which leads to congestion and swelling of the breast. This is a common physiological problem for lactating mothers that is caused by the sudden increase in the volume of the breast milk due to lymphatic and vascular congestion with interstitial edema during the first two weeks of breastfeeding.^[4]

STATEMENT OF THE PROBLEM

A Study to Evaluate the Effectiveness of Cabbage Leaves Fomentation on Pain and Discomfort during Breast Engorgement among Postnatal Mothers in Selected Hospitals at Bareilly, U.P.- A Pre-Experimental Study.

OBJECTIVES OF THE STUDY

1. To evaluate the effectiveness of cabbage leaves fomentation on pain of breast engorgement among post natal mothers.
2. To evaluate the effectiveness of cabbage leaves fomentation on the discomfort of breast engorgement among post natal mothers.
3. To find the association between level of pain and selected demographic variables among the postnatal mothers with breast engorgement in a selected hospital at Bareilly.
4. To find the association between level of discomfort and selected demographic variables among the postnatal mothers with breast engorgement in a selected hospital at Moradabad.

MATERIAL AND METHODS

A Pre-Experimental study (One group pretest and posttest research design) was conducted to evaluate the Effectiveness of Cabbage Leaves Fomentation on Pain and Discomfort during Breast Engorgement among Postnatal Mothers in Selected Hospitals at Bareilly, U.P. The conceptual framework for the present study was based on Health belief model. 50 samples were selected by using Convenience sampling technique for the present study. The data collection tool consists of three sections: A demographic performa, Numeric Pain scale and Discomfort rating scale. The data collection was analyzed by SPSS Version 20.

RESULTS

The result of the study revealed that Most of the participants (33.3%) were belongs to the age group between (18-22) and (23-26) year. Majority of the postnatal mothers (73.3%) having primary education. Most of the postnatal mothers (63.3%) were belonged to nuclear family. Majority of the postnatal mothers (56.7%) were belonged to the Hindu religion. Majority (63.3%) of the postnatal mothers are home maker. Most of the postnatal mothers (46.7%) belong to category of 1-3 days and 4-6 days. Also majority of the postnatal mothers (53.3%) having caesarean delivery. Most of the postnatal mothers (50%) having 1 child. Majority (60%) newborn were males. Approx half of the postnatal mothers (53.3%) were used to feed the baby at the interval of >2hourly. Most of the postnatal mothers (66.7%) belong to category of 10 min. duration of feeding. The study revealed during pre-test 76.7% of the participants had severe pain and 23.3% had moderate pain and during post test after the intervention 73.3% of the participants had no pain and 26.7% of the participants had mild pain the Mean difference of the pre test and post test score is 7.46. It shows that the cabbage leave fomentation is effective in reducing pain of breast engorgement among postnatal mothers ($p < 0.01$). During pre test 50% of the participants had severe discomfort and 50% had moderate discomfort and during post test 83.3% of the participants had mild discomfort and 16.7% of the participants had moderate discomfort the mean difference of the pre test and post test score is 28.06. It shows that the cabbage leave fomentation is effective in reducing discomfort of breast engorgement among postnatal mothers ($p < 0.01$).

DISCUSSION

Section 1: Findings related effectiveness of cabbage leaves fomentation on pain during breast engorgement among postnatal mothers:

Result of the present study revealed that the mean pre-test pain score was greater than the mean post-test pain score with the mean difference of 7.46 ($p < 0.05$). Hence it shows that cabbage leaves fomentation is effective in reducing during breast engorgement among postnatal mothers.

Finding of the present study congruent with study conducted by Joy J. (2016) to evaluate the effectiveness of chilled cabbage leaf application for relief of breast engorgement among postnatal mothers. The result of the study revealed that mean pre test score (14.86) is more than the mean post-test score (1.33). The result depicts that there is a significant difference between pre and post treatment score $p < 0.01$. Hence it can be said that chilled cabbage leave application is effective in reducing pain and severity of breast engorgement.

Section 2: Findings related effectiveness of cabbage leaves fomentation on discomfort during breast engorgement among postnatal mothers:

The mean pre-test discomfort score was greater than the mean post-test pain score with the mean difference of 28.06 ($p < 0.05$)

Nikodem VC. et al conducted a similar study to assess the effect of cabbage leaves on mother's perception of breast engorgement. Result of the study depicts that the mean pre treatment score of breast engorgement before application of chilled cabbage leaves (14.86) is more than the mean post treatment score (1.33). There is a significant difference between pre and post treatment score ($Z = 4.792$ $P < 0.001$). Hence it can be said that chilled cabbage leave application is effective in reducing pain and severity of breast engorgement.

A similar quasi experimental one group pretest posttest design was conducted by A Ruba 35 on 28 Postnatal Mothers in Coimbatore found that out of 28 Postnatal Mothers the breast engorgement was common in age group of 21-25 years and Primi gravida mother were more prone to develop breast engorgement than multigravida. The result of the study indicated that the Mean pre treatment score was 8 and the posttest score was 1.56, hence it showed that cabbage leaves is effective in treating breast engorgement.

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REFERENCES

1. Disha AR, Singh A, Suri V. Effect of chilled cabbage leaves vs. hot compression on breast engorgement among post natal mothers admitted in a tertiary care hospital. *Nursing and Midwifery Research*. 2015;11(1):24.
2. Prashanth C. Effectiveness of cabbage leaves application on breast engorgement. surat: *Indian journal of applied research*,vol:4. 2014;2249–555.
3. Amanpreet Kaur NS. Comparative study to assess the effectiveness of alternative hot and cold compresses v/s cold cabbage leaves on breast engorgement and pain among postnatal mothers. Punjab: *International journal of current research col*. 2015;7(ue,03):14000–14002.
4. Wong BB, Chan YH, Leow MQH, Lu Y, Chong YS, Koh SSL, et al. Application of cabbage leaves compared to gel packs for mothers with breast engorgement: Randomised controlled trial. *Int J Nurs Stud*. 2017;76:92–9.
5. Roberts KL, Reiter M, Schuster D. Effects of cabbage leaf extract on breast engorgement. *J Hum Lact*. 1998;14(3):231–6.
6. Gagandeep, Sagar N, Mamta, Kaur J. Efficacy of cabbage leaves in relief of breast engorgement among postnatal mothers. *Int J Nurs Educ*. 2013;5(2):76.
7. Joy J. A Study To Evaluate The Effectiveness Of Chilled Cabbage Leaves Application For Relief Of Breast Engorgement In Volunteered Postnatal Mothers Who Are Admitted In Maternity Ward Of Selected Hospital In Belgaum(Doctoral dissertation. Belgaum, Karnataka: KLE University; 2013.
8. Akanksha Thomas A, Rufaida College of Nursing, Jamia Hamdard, New Delhi, India. A quasi-experimental study to assess the effectiveness of chilled cabbage leaves on breast engorgement among postnatal mothers admitted in a selected hospital of Delhi. *Int J Nurs Midwifery Res*. 2017;4(1):8–13.
9. Wikipedia.org. [cited 2021 Jun 27]. Available from: <http://en.wikipedia.org/wiki/pain>.