

“A study to evaluate the effectiveness of cabbage leaves application on breast engorgement among primi post-natal mothers in selected hospitals of Udaipur (Raj)”

Ms. Deepika Teli¹, Mrs. Brincy Babu²

(Obstetrics and Gynaecological Nursing Department, Geetanjali college of Nursing/Geetanjali University, India) (Assistant Professor, Geetanjali college of nursing/Geetanjali university, India)

Abstract

BACKGROUND

Breast engorgement is the most common complication during the postnatal period. It is the disease condition occurs in the mammary glands by expanding veins and the pressure of new breast milk contained within them. The most common manifestations include considerable pain and feeling of tenderness in the breasts, generalised malaise, rise in temperature and painful breast feeding. Severe engorgement may lead to mastitis.

Materials and methods: It included the Quantitative research approach, pre experimental one group pre-test and post-test research design, variables under study were cabbage leaves as independent variable, breast engorgement among primi post-natal mother's dependent variable. Selected Hospital of Udaipur District as research setting, total 40 samples, and non-probability convenient sampling techniques was used. The nursing intervention cabbage leaves application was used for this study and tool used for data collection were socio-demographic data and 6 Point breast engorgement scale. The data obtained were analyzed and interpreted in the light of objectives and hypothesis using both descriptive and inferential statistical in terms of frequency, percentage and chi-square.

Results: Result revealed that calculated t value (9.24) is found highly significant at the level of $P=0.05$. it shows there is significant relationship between effect of Cabbage leaves application among primi post-natal mothers Hence research hypothesis H1 is proved and accepted. In experimental group Age in years $\chi^2= 26.03$, Occupation $\chi^2 = 24.29$, Type of family $\chi^2 = 22.02$, Type of delivery $\chi^2 = 13.02$, Frequency of feeding $\chi^2 = 18.26$ Source of information $\chi^2 = 21.6$ were found to be significantly associated with Pre-test level of Breast engorgement score at 0.05 level So there is a significant association between the pre-test level of Breast engorgement and selected socio- demographic variables among primi post-natal mothers. Hence Research hypothesis H2 is accepted.

Conclusion: The main focus of the study was to “Evaluate the effectiveness of Cabbage leaves application on breast engorgement among Primi post-natal mothers in selected hospitals, Udaipur (Raj)” The mean post- test score in experimental group Mean=2.6 Whereas in control group Mean was 4.05. The difference is statically significant .The calculated „t” value is $t= 2.29$ greater than the table value. The finding shows that the art therapy was highly effective in reducing the level of stress among patients with cancer. Hence, research hypothesis H1 accepted.

Key Words: Evaluate, Effectiveness, Breast engorgement, Primi post-natal mothers

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I. Introduction

Breast engorgement is painful congestion of the breasts with milk that can make it difficult for the baby to latch the mother breast properly. Breast engorgement is due to exaggerated normal venous and lymphatic engorgement of the breasts which precedes lactation. This in turn prevents escape of milk from the lacteal system. The primiparous patient and the patient with inelastic breasts are likely to be involved. Engorgement is an indication that the baby is not in step with the stage of lactation. It is characterized by the painful swelling of the breasts associated with the sudden increase in milk volume, vascular congestion, and edema during the first two weeks after birth which may lead to decreased milk supply, mastitis, or inflammation of the breast and association with serious illness as breast infection. (Finer & Zolna, 2014)¹

Use of cabbage leaf compress to alleviate the swelling and pain associated with Breast engorgement has been reported since 1800's. The common green cabbage is used for engorgement therapy. Cabbage is known to contain sinigrin (allyl isothiocyanate) rapine, magnesium, oxylate and sulphur heterosides. Herbalists believe that cabbage has both antibiotic and anti-irritant properties. It helps to decrease tissue congestion by

dilating (opening) local capillaries (small blood vessels), which improves the blood flow in and out of the area, allowing the body to reabsorb the fluid trapped in the breasts. Cabbage may also have a type of drawing, or wicking action that helps to move trapped fluid.

II. Materials and Methods

Quantitative research approach was used for the present study. This approach would help the researcher to evaluate the effectiveness of Cabbage leaves application on breast engorgement among primi post-natal mothers in selected hospitals Udaipur (Raj.).

Research design -Quasi experimental pre-test and post-test control group research design.

Research Settings: The study was conducted in the post-natal ward in Geetanjali Hospital, Udaipur Rajasthan.

Study duration: 01/02/2020 -25/02/2020.

Sample Size:40Primi post-natal mothers with breast engorgement.

Population:In the present study the population consists of mother’s with breast engorgement at Geetanjali & Ananta hospital at Udaipur, Rajasthan.

Sampling Technique: Non-Probability convenient sampling technique.

Inclusion criteria

Women who are having breast engorgement during data collection.

Postnatal mothers who had IUD or still birth.

Postnatal mothers whose babies are admitted in NICU and not feeding the babies regularly.

Primi post-natal mothers only.

Exclusion criteria

Postnatal women who are not willing to participate in the study.

Multipara post-natal mothers.

Procedure Methodology:The researcher got formal permission from the ethical committee of Geetanjali College of Nursing and concerned authority of Geetanjali & Ananta hospital for doing main study (experimental group and control group). The study participants those who are full fill there inclusion criteria were selected by non-probability convenient sampling techniques. Total no of samples were 40 in that 20 for experimental group and 20 for control group were assigned. Brief explanation about the study purpose and objective has given to primi post-natal mothers. Assurance is given to the post-natal mothers that the collected data will be utilized only for the purpose of study only. written consent is obtained from the each primi post-natal mothers and it will be maintained confidentially. Firstly, the investigator introduced herself to the mothers and established rapport with the mothers and collected the data regarding demographic variables. Six-point engorgement Scale was used to assess the level of breast engorgement. The investigator applied the cabbage leaves application only in experimental group. Pre-test was assessed using Six-point breast engorgement Scale and then post–test was conducted at the 7th day of pretest by using the same Six-point engorgement Scale for evaluating the effectiveness of cabbage leaves application. And no intervention to the control group

Statistical analysis: The obtained data were analyzed in terms of objectives of the study using descriptive and inferential statistics. The plan for data analysis was as follows Organization of data in master sheet. Obtained data were analyzed in terms of frequencies and percentages. Description Statistics: Description of demographic characteristics. Mean, median, SD and mean percentage is used to describe the pre-test and post-test stress score of the respondent regarding Breast engorgement. Inferential Statistics: Chi-square is used to find out the association between the pre-test level of stress with selected socio-demographic variables.

III. Results

SECTION-AAssessment of pre-test scores & post-test scores of breast engorgement in experimental group.

SECTION B-Effectiveness of intervention (Mean difference, ‘t’ value)

Section A:Assessment of pre-test scores & post-test scores of breast engorgement in experimental group

Table 1: Assessment of pre-test post test score of participants in experimental group.

S. No.	Scale	Scores	Experimental group				Control group			
			Pretest		Post test		Pretest		Post test	
			Frequency	Respondents in percentage	Frequency	Respondents in percentage	Frequency	Respondents in percentage	Frequency	Respondents in percentage
1	Soft, no	1	0	0%	0	0%	0	0%	0	0%

2	Slight change	2	0	0%	0	0%	0	0%	0	0%
3	Firm , no tender	3	02	10%	06	30%	02	10%	05	25%
4	Firm , beginning tenderness	4	06	30%	08	40%	06	30%	09	45%
5	Firm, Tender	5	07	35%	05	25%	07	35%	04	20%
6	Very Firm, Very Tender	6	05	25%	01	5%	05	25%	01	5%

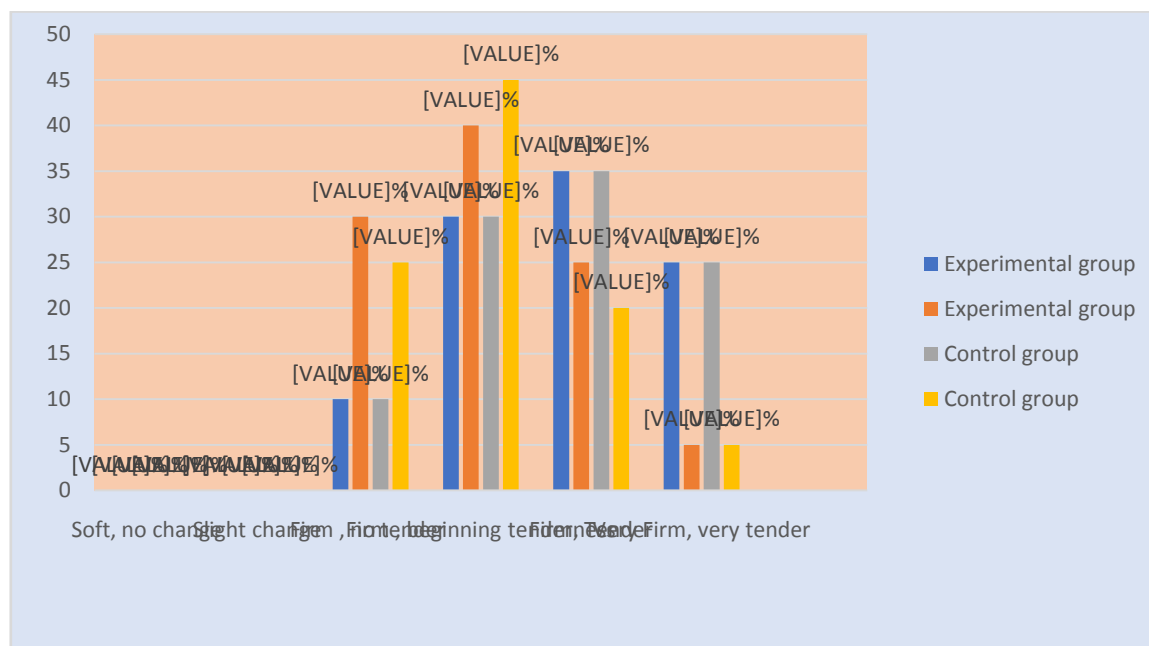


Table 2: Effectiveness of cabbage leaves application on breast engorgement among primi post-natal mothers in experimental group. **N=20**

Test	mean	mean %	SD	Mean difference	df	't'	Inference (p=0.05)
Pretest	4.65	77.50	1.79	2.05	19	2.29	S
post test	2.6	43.33	1.28				

S= Significant

There is a significant difference in the level breast engorgement before and after cabbage leaves application among primi postnatal mothers. The overall mean scores among experimental & control group was assessed. Mean was 2.6 Mean, percentage of 43.33% and SD 1.28 obtained in experimental group whereas in control group Mean was 4.05, Mean percentage 67.5 and SD 0.88 was obtained in control group. The difference is statistically significant. statistical significance was calculated by using difference of mean 't' test. The 't' value was 2.29 (significant at 0.05 level). There is significant difference between the experimental & control group in primi post-natal mothers. Hypothesis was tested at 0.05 level. The calculated value is significantly higher than the table value, this indicates that there is significant difference between the experimental group & control group hence hypothesis H₁ is accepted.

IV. Discussion

The present study has been undertaken to "Evaluate the effectiveness of Cabbage leaves application on breast engorgement among primi post natal mothers in selected hospitals Udaipur(Raj)" The First Objective was to assess the level of breast engorgement among primi post natal mothers before and after intervention. Before an intervention, majority of the respondents 7(35%) had firm, tender, 6(30%) had firm, beginning tenderness, 5(25%) had very firm, very tender, 2(10%) had firm, no tender. After an intervention majority of the

respondents 8(40%) had firm, beginning tenderness,6(30%) had firm, no tender,5(25%)had firm,tender,1(5%) had very firm, very tender.

A similar study was conducted by **Disha** in year 2015 at Nehru Hospital, PGIMR, Chandigarh. In the pre test majority of respondents7(35%)had firm, tender, 6(30%)had firm, beginning tenderness,6(30%) had very firm, very tender, 1(5%) had very firm, very tender. After intervention majority of respondents 9(45%) had firm, beginning tenderness,5(25%) had firm, no tender,5(25%)had firm,tender,1(5%) had very firm, very tender.

The Second Objective is to evaluate the effectiveness of cabbage leaves application on breast engorgement among primi post-natal mothers. In the pre-test before intervention, the mean pre-test score of breast engorgement among primi post-natal mothers was 4.65,Mean% 77.50,SD 1.79 whereas in post test after intervention, the mean was 2.6, mean% 43.33, SD 1.28. The ‘t’ value was 2.29(significant at 0.05 level).The calculated value is significantly higher than the table value ,this indicate that there is significant difference between the experimental group &control group hence hypothesis H₁ is accepted.

A similar quasi experimental one group pre-test and post-test study was conducted byPrincy Thomas in year 2017 at New Delhi. Which showed that the „t“ value 19.7.05 is greater than the table value at 0.05 level of significance. Hence the cabbage leaves is effective in reducing the level of breast engorgement.

The Third Objective is to find out the association between the pre-test finding score with selected socio demographic variables. There was a significant association between the level of breast engorgement with selected demographic variables such as Age in years $\chi^2= 26.03$,Occupation $\chi^2 = 24.29$,Type of family $\chi^2 =22.02$,Type of delivery $\chi^2 =13.02$,Frequency of feeding $\chi^2 =18.26$ Source of information $\chi^2 =21.6$ were found to be significantly associated with Pre-test level of Breast engorgement score at 0.05 level So there is a significant association between the pre-test level of Breast engorgement and selected socio- demographic variables among primi post-natal mothers. Hence Research hypothesis H₂ is accepted.

V. Conclusion

The study was conducted on “A study to Evaluate the effectiveness of Cabbage leaves application on breast engorgement among primi post natal mothers in selected hospitalsUdaipur(Raj)” In the present study40primi post natal mothers were selected through non probability convenient sampling technique. Researcher used quasi experimental one group pre-test and post- test research design to assess the breast engorgement among primi post natal mothers. Data were collected through 6- point breast engorgement scale and data were analysed through suitable statistical method.

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