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AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF CABBAGE LEAVES APPLICATION IN THE REDUCTION OF BREAST ENGORGEMENT AMONG POSTNATAL MOTHERS ADMITTED IN SELECTED HOSPITALS AT HYDERABAD

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ABSTRACT

The present study was aimed to assess the effectiveness of application of cabbage leaves in the reduction of Breast engorgement among post natal mothers. The conceptual frame work adopted for this study was derived from concepts of King's Nursing goal attainment helping theory. Objectives of the study:To assess the pre test pain scores on Breast engorgement among experimental and control group.To assess the effectiveness of application of Cabbage in reduction of breast engorgement through post test pain score. To find out the relationship between pre and post test pain score among postnatal mothers in experimental and control group. Accessible population is the list of population that researcher finds in study area. The accessible in the study was post natal mothers who are having age group of (19-35 yrs) and regularly visiting maternity hospitals, Hyderabad. Size of the study is 60 with Breast engorgement 30 mothers as experimental group, 30 post natal mothers as control group by using simple random sampling technique. Data analysis is the systematic organization and synthesis of research data, the testing of the research by hypothesis by using the obtained data. It is planned to analyze and interpret data with the help of descriptive and inferential statistics. The findings revealed that majority of the respondents 90% had severe breast engorgement both in experimental group and control group. Overall post test subjective numerical rating pain score among postnatal mothers outcome was effective. Hence, provision of pamphlet on cabbage leaves on Breast engorgement. The subjective numerical rating pain score among postnatal mother of experimental group had significantly improves after intervention of application of cabbage leaves on Breast engorgement. The application of cabbage leaves 4 times a day for 2 days was found to be very effective intervention in the reduction of Breast engorgement among postnatal mothers of experimental group. There was no association between postnatal mothers of experimental group with regard to Breast engorgement and selected demographic variables of age, education, occupation, income, type of family, source of information and mode of delivery.

INTRODUCTION

The present study is aimed to assess in the effectiveness of application of cabbage leaves to the reduction of Breast engorgement among post natal mothers. The conceptual frame work adopted for this study was derived from concepts of King's Nursing goal attainment helping theory.

STATEMENT OF PROBLEM:

An Experimental study to assess the effectiveness of cabbage leaves application in the reduction of breast engorgement among postnatal mothers admitted in selected hospitals at Hyderabad.

OBJECTIVES OF THE STUDY:

- To assess the pre test pain scores on Breast engorgement among experimental and control group.
- To assess the effectiveness of application of application of Cabbage in reduction of breast engorgement through post test pain score.
- To find out the relationship between pre and post test pain source among postnatal mothers in experimental and control group.

OPERATIONAL DEFINITIONS:

1. **Assess**: Estimating the level of breast engorgement relief
2. **Effectiveness:** It refers to the reducing discomforts of breast engorgement among postnatal mothers who are having breast engorgement.
3. **Cabbage Leaves Application:** Fresh cabbage leaves with crushed veins with a hole in center for the nipple and areola that is applied over the breast for a period of 2 hours.
4. **Reduction:** It is the coming down or bringing normal breast condition
5. **Breast Engorgement:** Breast engorgement refers to the firmness, tenderness and Swelling in the breast, creating discomfort in feeding to baby.
6. **Post-Natal Mothers:** All the mothers who are admitted in Post- Natal wards of selected hospitals during the postnatal period with firmness, tenderness
7. and swelling in the breast [1].

DELIMITATIONS:

Study is delimited to the postnatal breast engorged mothers of age group between above 19 and below 35 admitted in selected hospitals of Hyderabad.

.HYPOTHESES:

All hypotheses will be tested at 0.05 level of significance.

H1: There is significant association between pre test pain score on breast engorgement &selected demographic variables.

H2: There is significant association between post test pain score on breast engorgement &selected demographic variables.

H3: There is a significant difference between pre and post test pain score on breast engorgement.

Research Approach

The research approach adopted for the study was true experimental which is felt to be most appropriate.

Research Design

. The research design selected for the study was the true experimental randomized control group design has no random assignment of subjects to the experimental and comparison group.

The design was adopted with primary objective to find out the effectiveness of cabbage leaves application on breast engorgement among postnatal mothers.

In this study, a pre test is given to both experimental and control group. Then the intervention like application of cabbage leaves on breast engorgement is done to the experimental group, there by the independent variables was manipulated.

The effectiveness of application of cabbage leaves for reduction of breast engorgement on dependent variable.is analyzed ,by using statistical analysis methods

The research design was represented diagrammatically as follows:

Experimental group O1 X O2
Control group O1 O2

Key:
O1 - pre test
X - Intervention
O2 - Post test

SETTING OF THE STUDY:

The maternity hospitals are having physical facilities like outpatient department and inpatient department labour room. Each hospitals remains opened on all days for 24 hours approximately 40-50 mothers have come for post natal outpatient department in all these hospitals every day. The inpatient department also having 40-50 postnatal mothers in each hospital [2].

POPULATION:

Accessible population is the list of population that researcher finds in the study area .The accessible in the study was post natal mothers who are having age group of (19-35 yrs) and admitted in maternity hospitals, Hyderabad.

SAMPLE, SAMPLE SIZE & SAMPLING TECHNIQUE

Size of the study is 60 with Breast

engorgement 30 mothers as experimental group, 30 post natal mothers as control group by using simple random sampling technique [3].

Inclusion Criteria:

The study includes Post natal mothers who are :

1. Postnatal mothers with breast engorgement within age of above 19 to35 years.
2. Postnatal mothers who are willing to participate in the study.
3. Postnatal mothers who can understand Telugu/ English
4. Available at the time of data collection.

Exclusion Criteria: The study excludes Post natal who are :

1. Not willing to participate in this study.
2. Post natal mothers receiving lactation suppressants for breast engorgement.
3. Post natal mothers with mastitis, breast abscess, broken skin of breasts, bleeding or cracked nipples.
4. Who are participated in the pilot study.

Description of the Tool:

The researcher used the structured pain rating scale, which contains items on the following aspects.

Section-A: This section consists of 7 items on selected socio demographic data of the Participants in relation to their age, education, occupation, Income, type of family, place of residence and source of health personnel

Section-B: This section consists of structured pain rating scale to assess the effectiveness of cabbage leaves application on breast engorgement.

Section-C: This section consists of structured pain rating scale to observe the level of breast engorgement by the researcher, objectively

Section- D: This section consists of Wong baker pain rating scale, to assess the level of pain.

Scoring:

0 to 3	- Mild pain
4 to 6	- Moderate pain
8 to 10	- severe pain

Reliability:

It is the ability of the instrument to consistency measure what it intends to measure. The reliability of the tool is elicited by test – retest method for both experimental and control group. A sample of post natal Mothers with breast engorgement chosen, in that 3 are in experimental group and 3 are in control group and facial rating Scale and Wong baker subjective pain rating scale for the evaluate the effectiveness of application of cabbage leaves On breast engorgement. Karl Pearson coefficient and correlation computed for finding out the reliability. The'' r ''is found to be 0.92 this indicates that the tool is highly reliable [4].

DATA COLLECTION PROCEDURE:

Formal permission was obtained from concerned hospitals. The investigator introduced self and explained the purpose of the study. The samples were selected from the mothers who are having breast engorgement by using self structured engorgement scale. Informed consent from mothers were obtained. Cabbage leaves application provided to them for 4 per 24 hours, until engorgement subsides. If the engorgement was severe; compresses could be used as often as needed. At the end of the day breast engorgement was assessed by using pain scale [5].

Plan for data analysis:

Data analysis is the systematic organization and synthesis of research data, the testing of the research by testing hypothesis by using the obtained data. It is planned to analyze and interpret data with the help of descriptive and inferential statistics.

The following methods are planned to analyze the data

Section-I: Frequency and percentage description of samples selected demographic variables.

Section-II: Mean and standard deviation to determine the effectiveness of application of cabbage leaves in the reduction of breast engorgement among postnatal mothers.

Section-III: Relationship between pre test and post test effectiveness score on breast engorgement among post natal mothers.

Section-IV: Association between the pre test and post test effectiveness score on breast engorgement among post natal mothers [6].

ANALYSIS AND INTERPRETATION:

The study findings were organized and presented under the following headings.

Section–I: Frequency and percentage were organized for the description of stated demographic variables.

Section – II: Mean and standard deviation to determine the effectiveness of application of cabbage leaves for the reduction of Breast engorgement.

Section – III: Relationship between the pretest and post test pain score among post natal mothers with Breast engorgement in Experimental and control group [7].

Section –IV: Association between the pretest and post test effectiveness score on Breast engorgement among postnatal mothers and selected demographic variables [8].

H1: There is a significant relationship between pre and post test numerical rating pain score of information on postnatal mothers with Breast engorgement in experimental group.
H2: There is no significant relation between pre and post test score of intervention on Breasts engorgement of postnatal mothers in control group.

In experimental group the calculate 't' value is 13.21 is significantly higher than the table value. So the researcher accepted research hypothesis and reject null hypothesis, so it is proved that there is a significant relationship between pre and post test score of Breast engorgement among postnatal mothers in experimental group.

In control group the calculated 't' test is 1.04 significantly lesser than the table value. So the researcher accepted null hypothesis and reject research hypothesis, so it is proved that there is no significant relationship between pre and post pain score of Breast engorgement among postnatal mothers in control group.

H1: There is a significant relationship between pre and post test Wong Beaker pain score of information on Breast engorgement among postnatal mothers in experimental group.
H2: There is significant relation between pre and post test pain score of objective Wong backer pain score of postnatal mothers in control group.

In experimental group the calculate 't' value is 18.8 is significantly higher than the table value. So the researcher accepted research hypothesis and reject null hypothesis, so, it is proved that there is a significant relationship between pre and post test score of Breast engorgement among postnatal mothers in experimental group.

In control group the calculated 't' test is 3.33 significantly higher than the table value. So accepted research hypothesis and reject null hypothesis, so it is proved that there is a significant relationship between pre and post score of Breast engorgement among postnatal mothers in control group.

Research hypothesis: There is a significant association between pre test subjective numerical pain scale score and selected demographic variables in experimental group.
Association between post test subjective numerical pain rating scale score among postnatal mothers with selected demographic variables in experimental group [9].

Research hypothesis: There is a significant association between post test subjective numerical pain rating scale score and selected demographic variables in experimental group

Null hypothesis

There is no significant association between post test numerical pain rating scale core and selected demographic variables in experimental group.
Table – 13: Shows that the obtained Chi square value for education is 8.955. It is more than the table value for type of family obtained value is 4 more than the table value, so that research hypothesis is accepted and null hypothesis rejected, i.e., there is a significant association between post test submitting numerical pain rating scale score and selected demographic variables education, type of family in experimental group. But obtained value for age, occupation, income, source of information, mode of delivery lesser than table value so null hypothesis accepted.

Research Hypothesis: There is a significant association between pre test subjective numerical pain rating scale core and selected demographic variables in control group.

Null hypothesis: That is no significant association between pre test subjective numerical pain rating scale score and selected demographic variables in control group [10].

Table-13: Shows that there was no significant association between pre test subjective numerical pain rating scale score and selected demographic variables such as education, age, occupation, income, type of family, source of information, mode of delivery, source of information, model of delivery if less than the table values, so null hypothesis is accepted and research hypothesis has rejected in control group.
Research hypothesis: There is significant association between post subjective numerical pain rating scale score and selected demographic variables ion control group.

Null hypothesis: There is no significant association between post test subjective pain rating scale score and selected demographic variables in control group [11].

Table – 14: Shows that the obtained calculated valve for occupation is 85.839, income obtained value is 73.915, source of information obtained value is 87.325, these values are more than the table value so that research hypothesis is accepted and null hypothesis rejected i.e., there is a significant association between post test subjective numerical pain rating scale score and selected demographic variable occupation, income, source of information in control group. But obtained value of

delivery less than the table values so null hypothesis is accepted.

Research Hypothesis: There is a significant association between pre test objective Wong Baker pain scale score and selected demographic variables in experimental group.

Null hypothesis: There is no significant association between pre test objective Wong Baker pain scale score and sleeted demographic variables in experimental group.

Table -15: Shows that the obtained Chi square values for mode of delivery is 85.38. It is more than the table value so that research hypothesis accepted and null hypothesis rejected i.e., there is a significant association between pre test objective Wong Baker pain scale score and selected demographic variable mode of delivery in experimental group. But obtained values for age, education, occupation, income, type of family, source of information less than the table value so null hypothesis accepted.

Research hypothesis: There is significant association between post test objective Wong Baker pain scale score and selected demographic variables in experimental group.

Null hypothesis: There is no significant association between post test objective Wong Baker pain scale score and selected demographic variables in experimental group.

Table -16: Shows that the obtained Chi square value for education, age, occupation, income type of family, source of information and mode of delivery less than that the table value. So that rejected research hypothesis and accepted null hypothesis. i.e., there is no significant association between post test objective Wong Baker pain scale score and selected demographic variable in experimental group.

Research hypothesis: There is a significant association between pre test objective Wong Baker scale score and selected demographic variables in control group.

Null hypothesis: There is no significant association between pre test objective Wong Baker pain scale score and selected demographic variables in control group.

Table -17: Shows that the obtained Chi square values for mode of delivery is 10.398. It is more than the table value so that research hypothesis accepted and null hypothesis rejected i.e., there is a significant association between pre test objective Wong Baker pain scale score and selected demographic variable for age , occupation, education, type of family, source of information, mode of delivery less than the table value so null hypothesis accepted.
Research hypothesis: There is a significant association between post test objective Wong Baker scale score and selected demographic variables in control group.
Null hypothesis: There is no significant association between post test objective Wong Baker pain scale score and selected demographic variables in control group.

Table -18: Shows that there was no significant association between post test objective Wong Baker pain scale as age, education, occupation, income, type of family, source of information and mode of delivery is less than that the table value. So null hypothesis is accepted and research hypothesis was rejected in control group.

Table 1. Frequent and percentage distribution of postnatal mothers with Breast engorgement by age, education, occupation, income, source of information, type of family, mode of delivery in experimental and control group.

N = 30

Sl. No.	Variable	Experimental		Control group	
		Freq.	%	Freq.	%
1	Age				
	19-25 years	23	76.66	14	46.66
	26-30 year	5	16.66	11	36.66
	31-35 years	1	3.33	4	13.66
	> 35 year	1	3.33	1	3.33
2	Education				
	No formal education	6	20	10	33.33
	Primary education	13	43.33	10	33.33
	Secondary education	11	36.66	10	33.33
3	Occupation				
	Housewife	22	73.33	19	63.33
	Cooli	6	20	4	13.33
	Employee	2	6.66	7	23.33

4	Income Rs. 2000 Rs. 4000 > Rs. 6000	 2 6 22	 6.66 20 73.33	 1 4 15	 3.33 46.66 50
5	Type of family Nuclear family Joint family	 18 22	 60 40	 18 12	 60 40
6	Source of information Relatives Mass media Health personals Friends and peers	 30 0 0 0	 100 0 0 0	 28 0 0 2	 93.33 0 0 6.66
7	Mode of delivery LSCS NVD Forceps Volume	 29 1 0 0	 96.66 3.33 0 0	 28 2 0 0	 93.33 6.66 0 0

Table 2. Frequency and percentage distribution of response of the participants regarding pain due to Breast engorgement pre test and post test by using subjective pain scale in experimental group.

Subjective Scale	Experimental group																			
	Pre test										Post test									
	Never		Rarely		Occasionally		Seldom		Frequency		Never		Rarely		Occasionally		Seldom		Frequency	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
1. Do you have difficulty in feeding to baby while engorgement in the breast.	0	0	3	10	1	3.33	1	3.33	25	83.33	28	93.33	2	6.66	-	-	-	-	-	-
2.Do you have difficulty in sleeping while engorgement in the breast	0	0	2	6.66	5	16.66	4	13.33	19	63.33	30	100	-	-	-	-	-	-	-	-
3.Do you have discomfort	0	0	6	20	5	16.66	8	26.66	11	36.66	27	90	-	-	3	10	-	-	-	-
4.Do you feel glooming difficulty	2	6.66	-	0	8	26.66	8	26.66	12	40	30	100	-	-	--	-	-	-	-	-
5.Do you have difficulty while giving care to body?	4	13.33	9	30	4	13.33	9	30	4	13.33	25	83.33	5	16.66	-	-	-	-	-	-

6.Do you have difficulty in establishing bonding?	8	26.66	4	13.33	12	40	2	6.66	4	13.33	30	100	-	-	-	-	-	-	-	-
7.Do you have fear about the Breast engorgement?	2	6.66	2	6.66	8	26.66	6	20	12	40	30	100	-	-	-	-	-	-	-	-
8.Do you feel body looks ugly?	23	76.66	2	6.66	3	10	1	3.33	1	3.33	30	100	-	-	-	-	-	-	-	-
9.Do you have fatigue?	-	-	5	16.66	3	10	12	40	10	33.33	24	80	-	-	6	20	-	-	-	-
10.Do you feel need of control bed rest?	-	-	-	-	6	20	10	33.33	14	46.66	28	93.33	-	-	2	6.66	-	-	-	-
11.Do you have difficulty in eating food?	7	23.33	9	30	6	20	5	16.66	3	10	30	100	-	-	-	-	-	-	-	-
12.Do you have continuous trebling from the nipple?	1	3.33	5	16.66	2	6.66	8	26.66	14	46.66	20	66.66	5	16.66	3	10	2	6.66	-	-
13.Do you feel you are having firm and nipple?	2	6.66	4	13.33	3	10	7	23.66	14	46.66	30	100	-	-	-	-	-	-	-	-
14.Do you practice manual expression of milk?	4	13.33	4	13.33	8	26.66	2	6.66	12	40	1	3.33	5	16.66	14	46.66	8	26.66	2	6.66
15.Do you search the immediate measure to resolve from the Breast engorgement?	27	90	1	3.33	2	6.66	-	-	-	-	-	-	2	6.66	8	26.66	12	40	8	26.66

Table 3. Frequency and percentage distribution of response of the participants regarding pain due to Breast engorgement pre test and post test by using subjective pain scale in Control group

Subjective Scale	Control group																			
	Pre test										Post test									
	Never		Rarely		Occasionally		Seldom		Frequency		Never		Rarely		Occasionally		Seldom		Frequency	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%

1. Do you have difficulty in feeding to baby while engorgement in the breast.	-	-	-	-	1	3.33	1	3.33	28	93.33	-	-	-	-	1	3.33	1	3.33	28	93.33
2.Do you have difficulty in sleeping while engorgement in the breast	-	-	-	-	5	6.66	6	20	19	63.33	-	-	-	-	5	16.66	6	20	19	63.33
3.Do you have discomfort	-	-	-	-	5	6.66	8	26.66	17	56.66	-	-	-	-	5	16.66	8	26.66	17	56.66
4.Do you feel glooming difficulty	2	6.66	-	-	8	26.66	8	26.66	12	40	2	6.66	-	-	8	26.66	8	26.66	12	40
5.Do you have difficulty while giving care to body?	3	20	10	33.33	5	16.66	8	26.66	4	13.33	3	20	10	33.33	5	16.66	8	26.66	4	13.33
6.Do you have difficulty in establishing bonding?	7	46.66	5	16.66	12	40	2	6.66	4	13.33	7	46.66	5	16.66	12	40	2	6.66	4	13.33
7.Do you have fear about the Breast engorgement ?	3	10	2	6.66	8	26.66	6	20	11	36.66	3	10	2	6.66	8	26.66	6	20	11	36.66
8.Do you feel body looks ugly?	27	90	1	3.33	1	3.33	1	3.33	-	-	27	90.	1	3.33	1	3.33	1	3.33	-	-
9.Do you have fatigue?	-	-	2	6.6	2	6.66	14	46.66	12	40	-	-	2	6.66	2	6.66	14	46.66	12	40
10.Do you feel need of control bed rest?	-	-	-	-	4	13.33	12	40	14	46	-	-	-	-	4	13.33	12	40	14	46.66
11.Do you have difficulty in eating food?	7	23.33	9	30	6	20	6	20	2	6.66	7	23.33	9	30	6	20	6	20	2	6.66
12.Do you have continuous trebling from the nipple?	1	3.33	5	16.66	2	6.66	8	26.66	14	46.66	1	3.33	5	16.66	2	6.66	8	26.66	14	46.66

13.Do you feel you are having firm and nipple?	2	6.66	4	26.66	3	10	8	26.66	13	43.33	2	6.66	4	26.6	3	10	8	26.66	13	43.33
14.Do you practice manual expression of milk?	3	10	7	23.33	7	23.33	7	23.33	6	20	3	10	7	23.33	7	23.33	7	23.33	6	20
15.Do you search the immediate measure to resolve from the Breast engorgement ?	27	90	1	3.33	1	3.33	1	3.33	-	-	27	90	1	3.33	1	3.33	1	3.33	-	-

Table 4. Frequency and percentage distribution of response of the participants regarding pain due to Breast engorgement using by using objective pain scale in experimental group. Experimental Pre test and Post test

Objective Scale	Pre Test Score (10)		Post Test Score (10)	
	F	%	F	%
1.No hurt (0-1)	0	0	12	120
2.Hurt little bit (2-3)	0	0	5	50
3.Hurts little more (4-5)	5	50	6	60
4.Hurts even more (6-7)	4	40	7	70
5.Hurts whole lot (8-9)	10	100	0	0
6.Hurts warts (10)	11	110	0	0

Table 5. Control group by objective pain scale

Objective Scale	Pre Test Score (10)		Post Test Score (10)	
	F	%	F	%
1.No hurt (0-1)	0	0	0	0
2.Hurt little bit (2-3)	0	0	0	0
3.Hurts little more (4-5)	8	80	0	0
4.Hurts even more (6-7)	8	80	8	80
5.Hurts whole lot (8-9)	6	60	12	120
6.Hurts warts (10)	8	80	10	100

Table 6. Frequency and percentage distribution of postnatal mothers overall response of post test score for subjective numerical pain rating scale.

Group	Mild pain score		Moderate pain score		Severe pain score	
	Pre test	Post test	Pre test	Post test	Pre test	Post test
Experimental	1	29	13	0	16	1
Control	3	7	7	8	20	15

Table 7. Frequency and percentage distribution of post natal mothers overall responses of pre and post test score for objective Wong Baker pain scale.

Group	Mild pain score		Moderate pain score		Severe pain score	
	Pre test	Post test	Pre test	Post test	Pre test	Post test
Experimental	0	30	11	0	19	0
Control	0	0	19	19	11	11

Table 8. Mean and standard deviation pre test and post test pain assessment on Breast engaging among postnatal mothers by using subjective numerical rating scale for experiential and control group.

Group	Mean		Standard deviation	
	Pre	Post	Pre	Post
Experimental	45.33	20.3	8.974	11.839
Control	45.03	44.26	13.65	8.895

Table 9. Mean and standard deviation pre test and post test pain assessment on Breast engaging among postnatal mothers by using objective Wong Baker pain scale for experiential and control group.

Group	Mean		Standard deviation	
	Pre	Post	Pre	Post
Experimental	6.26	1.16	1.96	0.46
Control	6.53	6	2.25	2.25

Table 10. Comparison of pre test and post test subjective numerical raring pain score on postnatal mothers with Breast engorgement in experimental and control group.

Group	Calculated value 't'	Table value
Experimental	13.21	1.699
Control	1.04	1.699

Table 11. Comparison of pre test and post test objective Wong Baker pain score on postnatal mothers with breast engorgement in experimental and control group.

Group	Calculated value 't'	Table value
Experimental	18.8	1.699
Control	3.33	1.699

Table 12. Association between pre test subjective numerical pain scale score among postnatal mothers with selected demographic variables in experimental group.

Group	N	d.f	Calculated value (t)	Table value	Level of significance
Age	30	3	0.726	7.81	Non significant
Education	30	2	2.65	5.99	Non significant
Occupation	30	2	2.05	5.99	Non significant
Income	30	2	0.63	5.99	Non significant
Type of family	30	1	0.104	3..84	Non significant
Source of information	30	3	17.72	7.81	Significant
Mode of delivery	30	3	68.462	7.81	Significant

Table 13. Association between post test subjective numerical pain rating scale score among postnatal mothers with selected demographic variables in experimental group.

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	1.543	7.81	Non significant
Education	30	2	8.955	5.99	Significant
Occupation	30	2	1.262	5.99	Non significant
Income	30	2	5.034	5.99	Non significant
Type of family	30	1	4	3..84	Significant
Source of information	30	3	3.894	7.81	Non significant
Mode of delivery	30	3	0.534	7.81	Non significant

Table 14. Association between pre test subjective numerical pain rating scale among postnatal mothers with selected demographic variables in control group.

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	2.61	7.81	Non significant
Education	30	2	0.8	5.99	Non significant
Occupation	30	2	2.218	5.99	Non significant
Income	30	2	0.4	5.99	Non significant
Type of family	30	1	0.085	3..84	Non significant
Source of information	30	3	2.38	7.81	Non significant
Mode of delivery	30	3	0.809	7.81	Non significant

Table 15. Association between post subjective numerical pain scale among postnatal mothers with selected demographic variables in control group.

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	1.874	7.81	Non significant
Education	30	2	3.483	5.99	Non significant
Occupation	30	2	85.839	5.99	Significant
Income	30	2	73.915	5.99	Significant
Type of family	30	1	1.87	3..84	Non significant
Source of information	30	3	87.325	7.81	Significant
Mode of delivery	30	3	1.628	7.81	Non significant

Table 16. Association between pre test objective Wong Baker pain scale score among postnatal mothers with selected demographic variables in experimental group.

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	5.778	7.81	Non significant
Education	30	2	2.093	5.99	Non significant
Occupation	30	2	1.537	5.99	Non significant
Income	30	2	1.725	5.99	Non significant
Type of family	30	1	1.875	3..84	Non significant
Source of information	30	2	1.009	7.81	Non significant
Mode of delivery	30	3	85.38	7.81	Significant

Table 17. Association between post test objective Wong Baker pain scale score among postnatal mothers with selected demography variables in experimental group

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	2.703	7.81	Non significant
Education	30	2	2.598	5.99	Non significant
Occupation	30	2	2.656	5.99	Non significant
Income	30	2	2.475	5.99	Non significant
Type of family	30	1	0.432	3..84	Non significant
Source of information	30	3	1.742	7.81	Non significant
Mode of delivery	30	3	1.114	7.81	Non significant

Table 18. Association between pretest objective Wong Baker pain scale among postnatal mother with selected demographic variables in control group.

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	1.3536	7.81	Non significant
Education	30	2	0.8	5.99	Non significant
Occupation	30	2	0.581	5.99	Non significant
Income	30	2	10.398	5.99	Significant
Type of family	30	1	1.875	3..84	Non significant
Source of information	30	3	3.013	7.81	Non significant
Mode of delivery	30	3	0.858	7.81	Non significant

Table 19. Association between post test objective Wong Baker pain scale among postnatal mothers with selected demographic variables in control group.

Group	N	d.f.	Calculated value (t)	Table value	Level of significance
Age	30	3	1.023	7.81	Non significant
Education	30	2	0.8	5.99	Non significant
Occupation	30	2	0.581	5.99	Non significant
Income	30	2	1.242	5.99	Non significant
Type of family	30	1	0.021	3..84	Non significant
Source of information	30	3	1.628	7.81	Non significant
Mode of delivery	30	3	0	7.81	Non significant

Fig 1. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to age.

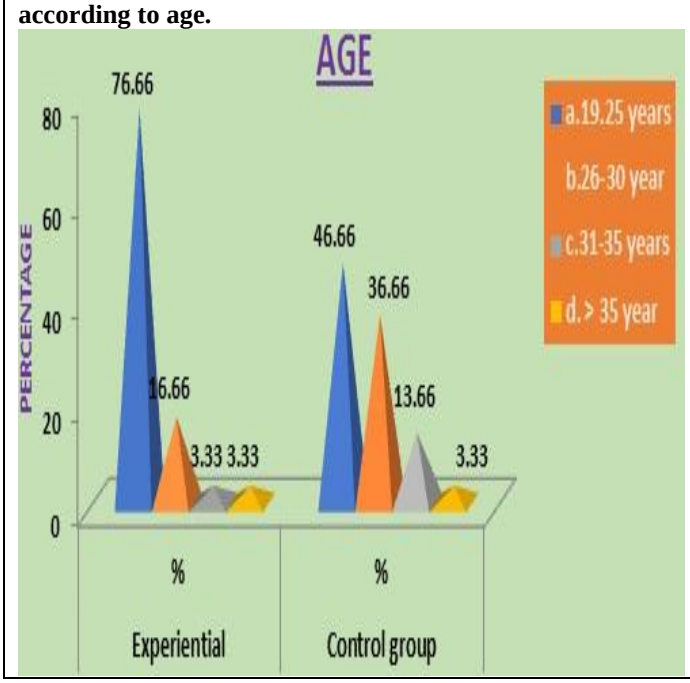


Fig 2. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to education.

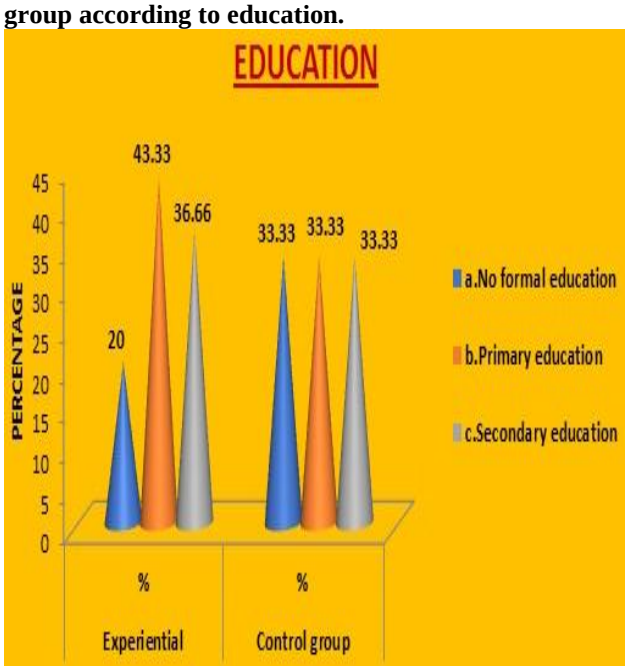


Fig 3. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to occupation.

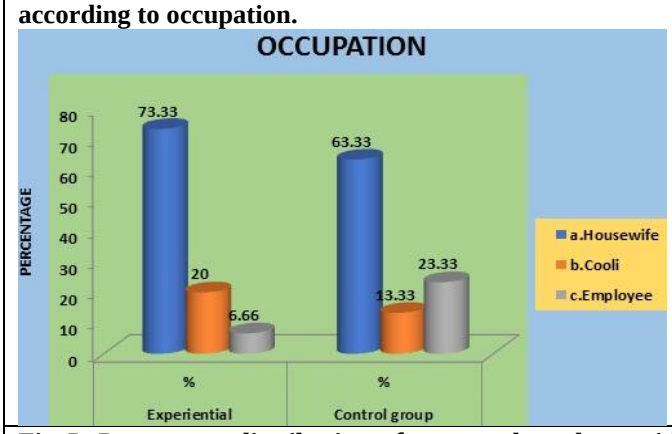


Fig 4. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to income.

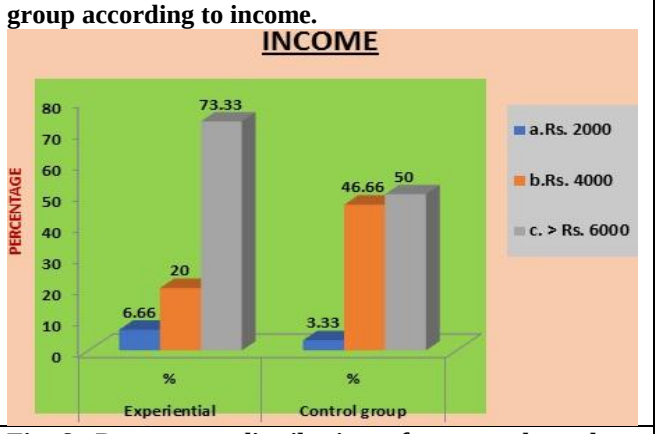


Fig 5. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to type of family.

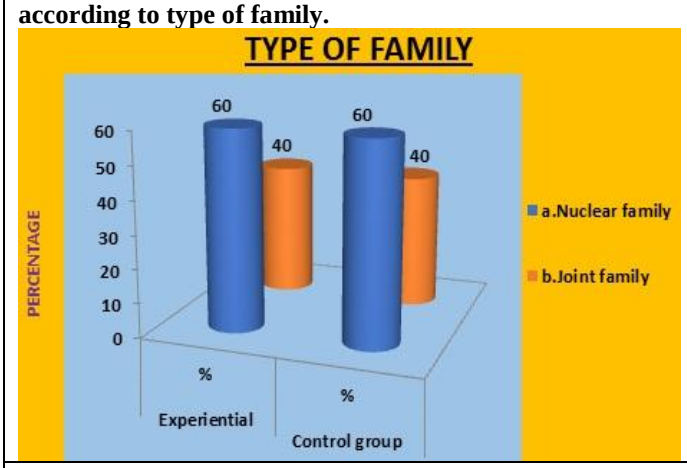


Fig 6. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to Source of information.

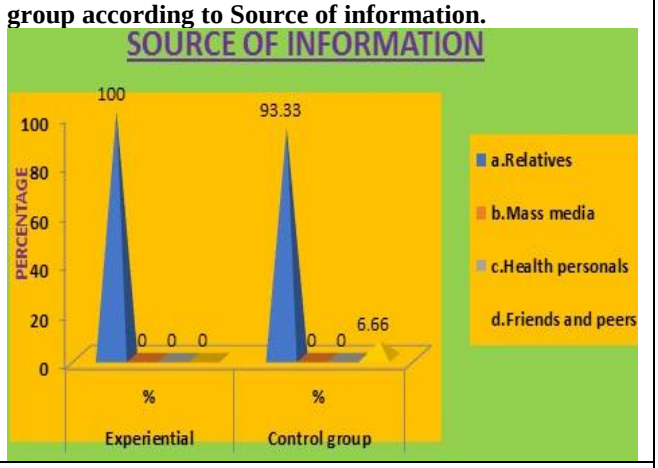


Fig 7. Percentage distribution of postnatal mothers with Breast engorgement in experimental and control group according to mode of delivery.

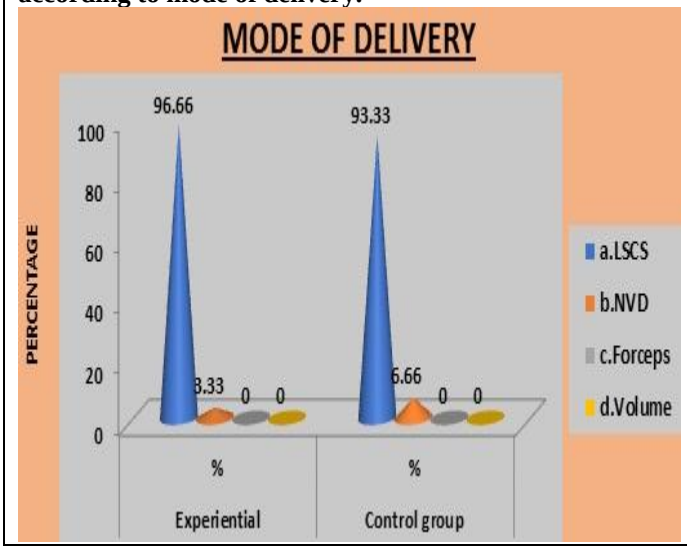


Fig 8.

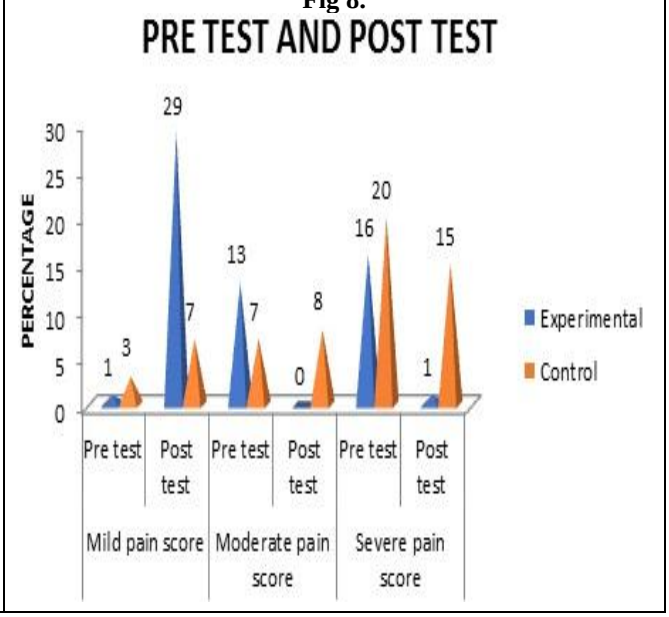


Fig 9.

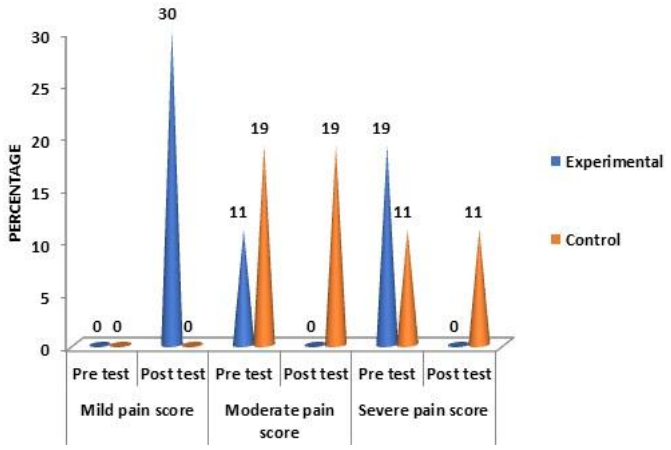


Fig 10.

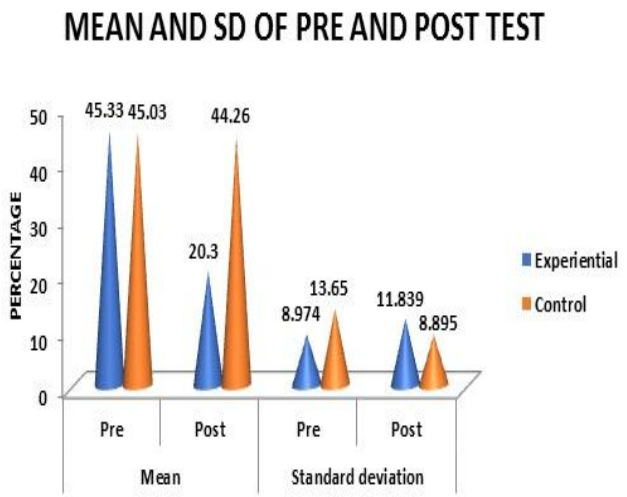


Fig 11.

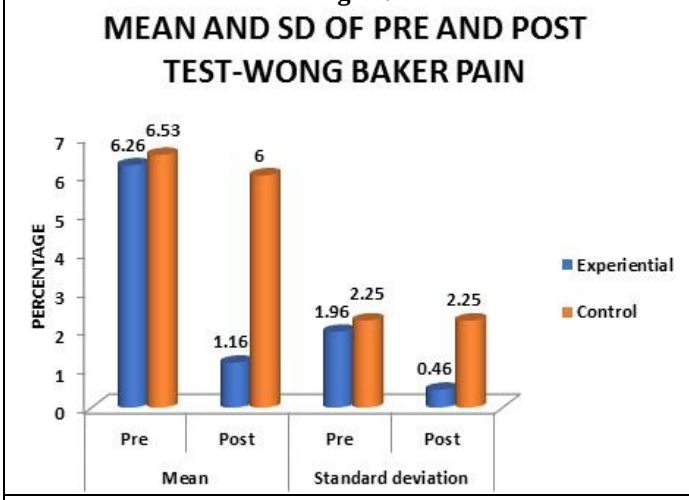


Fig 12.

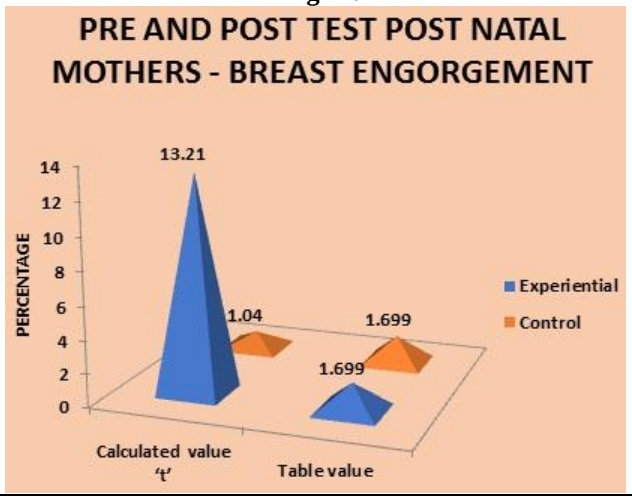
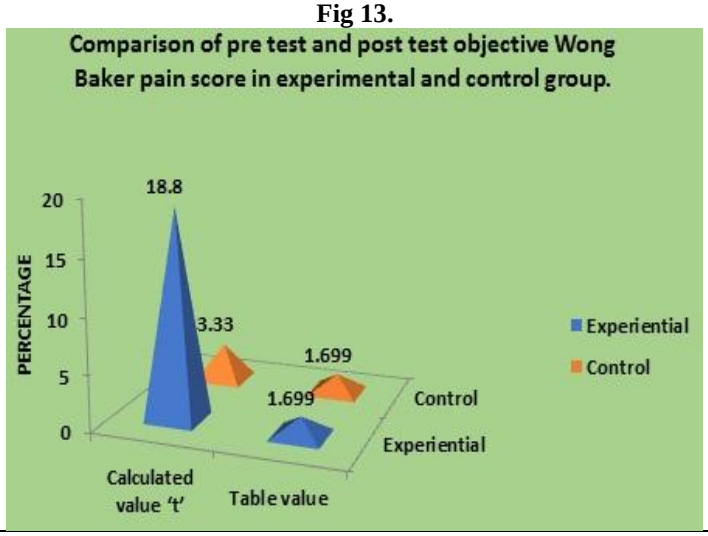


Fig 13.



DISCUSSION

In an effort to assess the breast engorgement among postnatal mothers. A True experimental design was conducted. A sample of 60 postnatal mothers out of that 30 samples selected as experimental group and 30 samples selected as control group. Posttest was conducted to assess the breast engorgement 2 times per day on fifth day post test was conducted for both group to assess the effectiveness of cabbage leaves application in the reduction of breast engorgement.

The stud's independent variables were age, education, occupation, income, source of information, mode of delivery. While the dependent variables were the assessment of pain due to breast engorgement among postnatal mothers, as evaluates through numerical rating pain scale, objective Wong Baker pain scale.

The finding obtained from the study are discussed in this chapter.

Characteristics of sample:

- Out of 60 respondents, 23 (76.66%) were in the age group of 19-25 years, 5 (16.66%) were under 26-30 years 1 (3.33%) respondents in the age of 31-35 years and 1(3.35%) respondent under the age of > 35 years.
- With regard to education, majority of the respondents 13(43.33%) wee in primary education, 11(36.33%) were in secondary education and 6(20%) were in no formal education.
- With regard to occupation majority of the respondents are in 22(76.66%) housewife ,6(20%) are in cooli, 2 (6.66%) are in employee. Where the control group 19(63.33%) are in housewife, 7 (23.33%) are in employment, 4 (13.33%) are in cooli.
- With the regard to income majority of the respondents 22(73.33%) are getting >6000, 6(20%) are getting Rs.4000/-, 2(6.66%) are getting Rs. 2000/-.
- With the regard to source of information majority of respondents 30(100) are relation given regarding health information.
- With the regarding to type of family 22(40%) were in joint family, 18(60%) were in nuclear family.
- With the regard to mode of delivery majority of respondents 29 (96.66%) were in lower segment cesarean section, 1(3.33%) respondent in normal vaginal delivery.

Frequency and percentage distribution of postnatal mother with breast engorgement on response about numerical rating scale.

In pre experimental group 16(53.33%) respondents stated that they are having severe pain, after intervention no one was stated that the same response, 13(43.33%) respondents stated that having moderate pain, 1(3.33%) respondent is having severe pain.

In control group 20(66.66%) respondents stated that they are having severe pain, 7(23.33%) respondents are having moderate pain, 3(10%) respondents are having mild pain.

Frequency and percentage distribution of postnatal mothers with breast engorgement of objective Wong Baker pain scale, by the Researcher

In pre experimental group majority 19(63.33%) respondent have severe pain, 11(63.66%) respondent are have that moderate pain assessed by the researcher. After intervention 0(0%) respondents have severe pain .

Analysis of the findings.

The first objective of the study as to assess the pre test pain score on breast engorgement among postnatal mothers in experimental and control group. In order to meet the above objective a pre and post test was conducted both experimental and control group.

The finding showed that in experimental group none of the mother fall under no pain in pre test and post test no one for severe pain. 1 mother had mild pain in pre experimental and 29 mothers respondents had mild pain in post experimental. Where in moderate pain 13 from pre experimental and none was reported in post experimental and severe pain 16 from pre experimental pain and 1 in post experimental.

With regard to control group majority 20 had severe pain, 7 members had moderate pain, 3 members have mild pain response from pre and pre and post test.

The Second Objective was to assess the effectiveness of application of cabbage leaves in the reduction of breast engorgement through post test pain score.

The findings showed that in pre experimental group none of the mothers had pain, 11 members have moderate pain, 19 members had serve pain, but after intervention none of the mother in severe pain, none of the mother in severe pain in the experimental post test with regard to control group majority 19 members had moderate pain, 11 members had severe pain score in pre and post test.

The third objective was to find out the relation between pre test and post test pain score among postnatal mothers in experimental and control group. In experimental group the calculated value 13.21 is significantly higher than the table value. So the researcher accepted research hypothesis and reject null hypothesis. So, it I proved that there is a significant relationship between pre and post score of pain score among post natal mothers in experimental group [12].

With regard to control group the calculated "t" value 1.4 if significantly lesser than the table value. So the accept Null hypothesis and reject research hypothesis. So

it is proved that there is no significant relationship between pre and post test pain score among postnatal mothers in control group.

The fourth objective of the study was to find out the association between pre intervention pain score and selected demographic variables among experimental and control group.

The demographic variables age, education, occupation, income, type of family, source of information, mode of delivery, had not show any significant relationship with the pre test level at score of Breast engorgement postnatal mothers in experimental group.

With regard to the control group, the demographic variables are age, education, occupation, income, type of family, source of information, mode of delivery none of them had shown any statistically significant relationship with pre test level score of breast engorgement among postnatal mothers.

SUMMARY

The major findings of the study were:

1.Majority of respondents 23(76.66%) belongs to 19-25 years in experimental group,14(46.66%) were under 19-25 years in control group.

2. Majority of respondents 13 (43.33%) are having primary education in experimental ,majority of the respondents 10 (33.33%) no formal education, primary, secondary education in control group.

3. with regard to occupation majority of respondents 22 (73.33%) are in house wife in experimental group, majority of respondents 19 (63.33%)are in house wife in control group.

4. Majority of respondents 22 (73.33%) are getting Rs > 6000 income in experimental group, majority of respondents 15 (50%) are getting Rs > 6000 income in control group.

5. Majority of respondents 22 (73.33%) are living in joint family in experimental group, majority of respondents 18 (50%) are living in nuclear family in control group.

6. With regard to the source of information on breast engorgement majority of the respondents 30 (100%) were getting health information from relatives in experimental group, majority of respondents 28(93.33%) were getting health information from relatives in control group.

7. Majority of respondents 29 (96.66%) of mode of delivery under LSCS in experimental group, majority of respondents 28(93.33%) of mode of delivery under LSCS in control group.

Analysis of pre test and post test pain scale scores:

The overall mean score of Breast engorgement among post natal mothers was 45.33 with (SD=8.974) in the pre test and post test mean score was 20.3with (SD =11.839) in case of experimental group, while for control group the mean score was 45.06 with (SD =13.65) in the pre test and in the post test mean score was44.26 with (SD =8.895).

Paired 't' test was calculated to find out the relationship between pre test and posttest scores which enables the researcher to evaluate the effectiveness of application of cabbage leaves in the reduction of Breast engorgement.

The calculated 't' value was 13.21which was stability highly when compared with the table value significant at <0.05 level which clearly show true was significant relationship between pre test and post test pain scale score among postnatal mothers in experimental group. Hence the cabbage leaves application is effective in the reduction of Breast engorgement.

CONCLUSION

The findings revealed that majority of the respondents 90% had severe breast engorgement both in experimental group and control group overall post test subjective numerical rating pain score among postnatal mothers outcome was effective. Hence, provision of pamphlet on cabbage leaves on Breast engorgement.

The subjective numerical rating pain score among postnatal mother of experimental group had significantly improves after intervention of application of cabbage leaves on Breast engorgement.

The application of cabbage leaves 4 times a day for 2 days was found to be very effective in interleaving the reduction of Breast engorgement among postnatal mothers of experimental group.

There was no association between postnatal mothers of experimental group with regard to Breast engorgement and selected demographic variables of age, education, occupation, income, type of family, source of information and mode of delivery.

Limitation:

The sample size was small which interfered with the generalization of findings.

Implementation and Recommendations:

The finding of the study have following implementation in the areas of nursing service, nursing administer nursing education and nursing research.

1. Implementation of present study in the nursing service:

Nursing play a vital role in improving knowledge as lack of knowledge on Breast engorgement is one of the major problem and it is necessary to give information to the mother for reduction of Breast engorgement to avoid completion. The knowledge will influence better practice and develop a positive attitude

towards their health. The present study should that most of postnatal mothers had Breast engorgement. Hence there in a need for efforts by health professional to increase the knowledge on interventions that can be used for Breast engorgement.

2.Implication of the present study in the nursing education:

Nursing education emphasizes that health care system should pay more attention on training the nursing students so that the nurses themselves will become knowing and can help others as by imparting health education by using various methods of educational technology. The students should be mode occur if the impotence of educating the public regarding causes of Breast engorgement and its complications.

3.Implications of the present study in the nursing administration:

The nurse administrator should take interest in providing information to postnatal mothers regarding Breast engorgement causes and it reduction and nursing care in community nursing homes and hospitals planning postnatal mothers health programme and supervising care in different levels. Nurse can also coordinate and discuss about care and complications of Breast engorgement among postnatal mothers and meetings so that the health progammes are organized at various levels for postnatal mothers. Thus creating awareness in order to control the complications of Breast engorgement.

4.Implication of present study in the nursing research:

Currently nursing practice based on evidence based practice. So it is important to research to obstetrical and gynecology nurses. In order to plan health education programme to improve the knowledge of the postnatal mothers.

RECOMMENDATIONS:

1. A similar study to can be done on selected post natal mothers with breast engorgement.
2. A similar study can be done on selected interventions
3. A comparative study can be done with rural and urban population
4. A comparative study can be done with other interventions.

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