JETIR.ORG

ISSN: 2349-5162 | ESTD Year: 2014 | Monthly Issue



# JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

# "A STUDY TO ASSESS THE EFFECTIVENESS OF LUKEWARM WATER COMPRESS ON **BREAST ENGORGEMENT AND** TENDERNESS AMONG PRIMI POSTNATAL MOTHERS AT SELECTED HOSPITALS **MORADABAD.**"

Ms. Shashi<sup>1</sup>, Mrs. Hemalatha<sup>2</sup>, Ms. Rana Kamar<sup>3</sup>

M.sc nursing (obstetrics Gynaecological Nursing) student, 2. HOD and Assistant Professor 3. Tutor (P.G), Teerthanker Mahaveer College of Nursing, TMU, Moradabad.

### **ABST**RACT

With view to a study to assess the effectiveness of lukewarm water compress on breast engorgement and tenderness among primi postnatal mothers at selected hospitals Moradabad. The Quasi- experimental study with quantitative approach was conducted among 70 primi postnatal mothers. Purposive sampling technique was used in selecting the primi postnatal mothers. Study reveals that mean posttest score of breast engorgement and tenderness in experimental group (2.6± 0.53) was lesser than mean post test score of control group.

**Keywords:** Breast engorgement and tenderness, Luke warm water compress Primi postnatal mothers.

# **INTRODUCTION:**

Pregnancy is wonderful and very joyful news in most of the women's life, become pregnant and giving birth to a baby is a wonderful movement and feelings of satisfaction and accomplishment in her life. The

whole family looks forward to welcome the baby. But any interruption in achieving this goal makes women's life very much annoying, frustrating and feeling of unhappy.

Breast feeding is the universally preferred method of feeding a New born, because it provides numerous health benefits to both the mother and the infant. It is economically efficient, needs very little investment, gives invaluable returns to the family and to the Nation. Breastfeeding rates in Punjab, Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, and Delhi were below 45% (National health survey 2009). The incidence rate of breast engorgement throughout the world is 1:8000, and India, it is 1:65000. Sign & symptoms occur most commonly between days three and five, with more then two thirds of women tenderness on day five but some as late as day 9-10. Majority experience moderate symptoms. More time spent in breast engorgement. About 20% & post — natal mothers especially primigravida mothers are affected with breast engorgement from 0-4 days of postnatal periods. Delayed breast feeding can produce breast complications like breast engorgement and breast abscess. Breast engorgement occurs around the third and fifth postnatal day in varying degrees from slight to severe (Robert 2000). The reason why engorgement occurs in the first two weeks postpartum is that the mother and her baby are adjusting to the process of demand and supply: i.e. if the milk production is increased too rapidly this may exceed the capacity of the breast alveoli to store it.

## **OBJECTIVES**

1. To determine the effectiveness of lukewarm water compress on breast engorgement and tenderness among primi postnatal mothers of experimental and control group. 2. To find the association between the level of breast engorgement and tenderness with selected demographic variables of primi postnatal mothers.

### **HYPOTHESES**

All hypothesis will be tested at 0.05 level of significance.

H<sub>1</sub>:- There is a significant difference between the mean pre test and post test score of breast engorgement and tenderness among primi postnatal mothers of experimental group.

H<sub>2</sub>:-There is a significant difference between the mean post test score of breast engorgement and tenderness among primi postnatal mothers of experimental and control group.

H<sub>3</sub>:- There is a significant association between the post test level of breast engorgement and tenderness among primi postnatal mothers of control group with their selected demographic variables.

## MATERIAL AND METHODOLOGY

A Quasi experimental pre test and post-test design and quantitative approach was adopted to carry out the study. The study population comprised of all primi postnatal mothers admitted in selected hospitals of Moradabad. The sample size was 70 primi postnatal mothers.

Non probability purposive sampling technique was used for selecting sample of the study. The tools used for study were a six point breast engorgement scale, It consists of two parts

Part1: Socio- Demographic data

Part2: six point breast engorgement scale.

Table 1 Frequency and percentage distribution of primi postnatal mothers with breast engorgement according to socio-demographic variables.

(N=35+35)

Demographic variable	Category	Experimental group		Control group	
		Frequency(f)	%	Frequency(f)	%
Age in years	20-25	24	68.6	25	71.4
	26-30	9	25.7	8	22.9
	31-35	2	5.7	2	5.7

(N=35+35)

Demographic variable	Category	Experimental group		Control group	
		Frequency (f)	%	Frequency	%
				(f)	
Religion	Hindu	21	60	24	68.5
	Muslim	14	40	10	28.6
	Christian	0	0	1	2.9
	others	0	0	0	0

Demographic variable	Category	Experimental group		Control group	
	A Committee of the comm	Frequency(f)	%	Frequency(f)	%
Education	No formal education	12	34.3	6	17.1
	Primary	8	22.9	11	31.4
	Secondary	6	17.1	9	25.7
	Higher secondary	0	0	1	2.9
	Graduate and above	9	25.7	8	22.9

(N=35+35)

Demographic variable	Category	Experimental group		Control group	
		Frequency	%	Frequency	%
		(f)		(f)	
Family monthly	Less than Rs.5000	8	22.9	12	34.4
income	Rs. 5001- Rs 10000	13	37.1	11	31.4
	Rs. 10001- Rs. 15000	8	22.9	6	17.1
	Above 15000	6	17.1	6	17.1

(N=35+35)

Demographic variable	Category	Experimental group		Control group	
		Frequency(f)	%	Frequency(f)	%
	Rural	14	40.0	14	40.0
Residence	Urban	21	60.0	21	60.0

(N=35+35)

Demographic	Category	Experimental group		Control group	
variable		Frequency(f)	%	Frequency(f)	%
variable		1 requericy(1)	70	Trequency(1)	/0
	Busines	1	2.9	0	0
	Government employee	0	0	0	0
Occupation	Private employee	4	11.4	1	2.8
Occupation	Home maker	27	77.1	31	88.6
	Other	3	8.6	3	8.6

(N=35+35)

Demographic variable	Category	Experimental group		Control group	
		Frequency(f)	%	Frequency(f0	%
Type of delivery	Normal delivery	12	34.3	15	42.9
	Caesarean delivery	23	65.7	20	57.1

Table-2: Comparison of mean pre- test and mean post-test breast engorgement score of the primi postnatal mothers with breast engorgement in experimental group

(N=70)

Observation	Mean±SD	Mean difference	't' value (p value )
Pre-test	5.4 ± 0.6		
Post-test	4.2± 0.71	1.2± 0.58	12.15

 $t_{(34)} = 2.02, p < 0.05$ 

S\*-significant, NS-Non Significant

Table 2 reveals that the mean post test score  $4.2\pm0.71$  of the experimental group was lesser than the mean pre test score  $5.4 \pm 0.6$  with the mean difference of 1.2 Hence it shows the warm water compression is effective in reducing of breast engorgement among primi postnatal mothers.

The calculated t value was 12.15 greater than the table value 2.0 hence hypothesis (H<sub>1</sub>) is accepted and inferred that there is significance difference in the mean pre- test and mean posttest breast engorgement score. Therefore, it was concluded that there is significant decrease in breast engorgement in post test compared to that in pretest after application of hot water compression. So it proves that the hot water application is effective in reducing the breast engorgement.

Table 3: Comparison of post- test scores of the primi post-natal mothers with breast engorgement in experimental and control group. (N=70)

	Mean ± SD	Mean difference	't' value
Post-test			
Experimental group	$2.6 \pm 0.53$	1.6	12.30
Control group	4.2± 0.7		

 $t_{(69)} = 2.00, p < 0.05$ 

S\*-significant, NS-Non Significant

Table 3 reveals that mean posttest score of breast engorgement and tenderness in experimental group  $(2.6\pm0.53)$  was lesser than mean post test score of control group  $(4.2\pm0.7)$  with the mean difference of (1.6) and t value is 12.30 Hence it shows that the warm water compression is effective in reducing breast engorgement among postnatal mothers.

The calculated 't' value was (12.30) greater than the tabled value (2.00),

Hence the hypothesis H<sub>2</sub> is accepted and inferred that there is significance difference in the mean posttest breast engorgement scores of experimental and control group.

### Discussion

The findings of the present study discussed with other related studies and organized under following discussion.

In experimental group, most of the primi postnatal mothers i.e 68.6% were belongs to the category of 20-25 years, in control group, most of the primi postnatal mothers i.e 71.4% were belongs to the category of 20-25 years, in experimental group, most of the primi postnatal mothers were belongs to the category of Hindu 60%, In control group, most of the primi postnatal mothers were belongs to the category of Hindu religion 68.6%, in experimental group most of the primi postnatal mothers having, no formal education i.e 34.3%, In control group, most of the primi postnatal mothers were having primary education 31.4%, in experimental group most of the primi postnatal mothers having, Rs 5001-Rs 10000, 37.1%, In control group, most of the primi postnatal mothers having, less than Rs.5000 that is 34.4%, in experimental group, most of the primi postnatal mothers were belongs to the category of urban area that 60%, In control group, most of primi postnatal mothers were belongs to the category of urban area that 60%, in experimental group most of the primi postnatal mothers i.e,77.1% were home maker, In control group most of the primi postnatal mothers i.e,77.1% were home maker, In control group most of the primi postnatal mothers i.e,77.1% of participants undergone caesarean delivery.

A supported study was conducted by Moumita Manna1, Lily Podder in to compare the effectiveness of between hot fomentation and cold compression as the treatment of breast engorgement and tenderness. The study finding showed that the there was statistically reduction in pain intensity in cold compression group

was 6.1% which was 4.9% in hot fomentation group. Reduction in pain intensity score of cold compression group was significantly higher than that for hot fomentation group (p=0.001). Average reduction in breast engorgement score in cold compression group was 3.6 which was 3.4 in hot fomentation group. Reduction in breast engorgement score of cold compression group was not significantly higher than that for hot fomentation group (p=0.116). Study concluded that both intervention were effective in reducing the breast engorgement but most of the primi postnatal mothers preferred warm water compression.

### Conclusion

The present study result shows that the lukewarm water compression is effective method to treat the breast engorgement. Lukewarm water has positive effects on the primi postnatal mothers.

### Recommendations

To improve the infant's breast feeding practice and prevent breast complication early detection of breast engorgement and nursing care important.

Utilize the warm water compression in all clinical practice.

Offered for the furthers research include a similar study to be conducted with large number.

# **CONFLICTS OF INTEREST: Nil**

FUNDED BY: No agencies given fund, it is self-funded.

**ETHICAL CLEARANCE:** Prior permission was obtained from research committee of institute and Women District Hospital and samples.

# **REFERENCES**

- Sharma J.B midwifery (2014), Gynaecological Nursing annual Avichal publishing company 2nd edition page no-35-41
- 2. A. Jacob (2019) A comprehensive text book of midwifery and gynaecological Nursing Midwifery Jaypee brothers Page no- 42-118.
- 3. Dutta. D.C (2004) Text Book of Obstetrics 6<sup>th</sup>edition, New Central Books Publications; page no 601.

4. F.D. polit (2004) Beck C T. Nursing research principles and practice 7<sup>th</sup> edition , New Yurk: Lippincott Williams and Wilkins, P.88-90.

# Online resources

Wikipedia the tree enclopedia 21 March (2018). Tenderness rerived from http://en.wikipedia .org/wiki/tenderness.

https://ijrti.org/papers/IJRTI1805051.pdf

https://www.researchgate.net/publication/312552225\_Effectiveness\_of\_Hot\_Fomentation\_Versus\_Cold\_C ompression on Breast Engorgement among Postnatal Mothers.

International Journal of Research and Review Vol.7; Issue: 6; June 2020 Website: www.ijrrjournal.com Original Research Article E-ISSN: 2349-9788; P-ISSN: 2454-2237.

Available Online at http://www.uphtr.com/IJNRP/home International Journal of Nursing Research and Practice EISSN 2350-1324; Vol. 3 No. 1 (2016) January—June