The impact of applying dry heat versus moist heat on alleviating breast engorgement in postnatal mothers

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Abstract: Introduction: Breast engorgement can be a physiological circumstance it's far characterised by way of agonizing swelling of the breasts because of deficiently breastfeeding and/or clogged milk duct. When mother experiences severe pain of feeding the baby due to engorged breast which makes mother to worry and creates fear about breastfeeding. Aim: The study was done to check at the viability among dry heat and moist heat because of the fact the remedy of breast engorgement and lessening of breast pain. Methodology: Evaluative approach was used. The usage of non-probability random sampling technique was adopted. 60 postnatal mothers from hospital of Chennai were enrolled for the study. Data collection was completed through interview, self-administered questionnaire and direct observation. Data was analysed through way of using descriptive and inferential statistics. Results: Regular decreasing in ache escalated in moist heat enterprises end up 6.1 that have been 4.9 in dry heat group.(p=0.001). Everyday diminishment in breast engorgement rating in moist heat modified into 3.6 that have been 3.4 in dry heat. Lessening in breast engorgement score of moist warmth organization have come to be essentially higher than that for dry warmness (p=0.116). Conclusion: The study concluded that moist heat was determined greater viable in diminishment of breast engorgement while moist warmness turned into located extra achievement in diminishment of ache rating because of breast engorgement among postnatal mothers. Keywords: Breast engorgement, Dry heat, Moist heat, Postnatal Mothers.

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INTRODUCTION:

Background of the study:

Postpartum period is the time that starts off after the delivery and expands for about six weeks. Postpartum care's important role is to guarantee that the mother is robust and prepared with all of the information which she needs spherical breast nourishing, regenerative health, contraception, and alteration to lifestyles.1 Breast milk is the principle nourishment for the born babies.2 Be that as it may, elite breastfeeding is now after which hindered due to the variables which includes areola hollow, mastitis, and torment associated with breast engorgement (BE). Breast engorgement is one of the number one common trouble among lactating mothers.3 In BE, breasts are overfilled with drain and ended up overwhelming, swollen, and painful.4 The prevalence of BE case is 20%–70%.5 Breastfeeding is brilliant way in giving nutritional dietary supplements to younger new-born youngsters for their stable improvement and development.6 Colostrum is the number one which really is added with the beneficial resource of the mother earlier than long after beginning and is exceptional for the unused born as it's miles wealthy in antibodies. World Health Organization (WHO) and UNICEF prescribe that breastfeeding need to be started out as early as feasible after conveyance and pick breastfeeding must be preceded till 6 months of age. The kid should be breastfed on request counting day and night time Bottles, nipples, or pacifiers need to not be applied and breastfeeding need to be proceeded up to 2 years of age.7 Concurring to the global breastfeeding scorecard 2018, universally, loads much less than 50% of unused born toddlers begin breastfeeding within an hour of delivery. In boom, forty one% of new-born children a whole lot an lousy lot less than 6 months of age are honestly breastfed, far off brief of the 2030 worldwide purpose of 70%. However the truth that over -thirds of mothers continue breastfeeding for at slightest 1 year, through 2 years of age. Breast feeding charges drop to 45%.8 one of the crucial steps in breastfeeding method is growing a distinction the kid to connect to the breast because it must be. An extraordinary lock dispenses with the trouble of sore areolas and right breastfeeding reduces the possibilities of other breastfeeding headaches.

PROBLEM STATEMENT

To determine the effect of dry heat versus moist heat application on reduction of breast engorgement among postnatal mothers.

OBJECTIVES

1. To assess the effect of dry heat application on engorgement of breast
2. To assess the effect of moist heat application on engorgement of breast
3. To compare the effects of dry heat and moist heat application on engorgement of breast

HYPOTHESIS

1. There will be a significant difference in de-engorgement of breast between women receiving dry heat and moist heat application.
2. There will be a significant difference in level of pain between women receiving dry heat and moist heat

METHODOLOGY

Research Approach: Evaluative Research Approach

Research Design: Quasi experimental design

Setting: Postnatal ward in selected hospital at Chennai

Population: Mothers who had vaginal delivery

Sample: Postnatal mothers

Sample Size: 40 mothers

Sampling Technique: Non Probability Convenient sampling technique

Sampling Criteria:

Inclusion Criteria:

a. Postnatal mothers with normal vaginal delivery and instrumental delivery
b. Postnatal mothers with breast engorgement
c. Postnatal mothers who are breastfeeding

Exclusion Criteria

a. Postnatal mothers who had caesarean section.
b. Postnatal mothers and new born who had developed complications

Description of the tool

The tool consists of 2 parts

Part 1: Socio-demographic Variables

Part 2: Breast engorgement pain assessment scale (Visual Analogue Scale)

Data Collection Procedure:

Data collection period was for four weeks. Written permission was obtained from the ethical committee and HOD of OBG. The postnatal mothers were assessed every day for engorgement of breast, and those who fulfilled inclusion criteria were considered as samples. Explained about the procedures and verbal consent was obtained. Conveniently for first 15 days of data collection period, dry heat was applied for group-1; from 15 to 30 days that is, in the 2nd phase of data collection period, same way moist heat was applied for group-2. Pre-assessment of engorgement and the pain was done for both groups. The intervention was given to both groups. Post-test assessment was done

immediately after application in the time interval, one hour, 2 hours and 3 hours. The investigator was sensitive to the privacy, dignity, religious and cultural beliefs of the mothers though out the study.

Data Analysis

The findings were analysed by descriptive and inferential statistics.

RESULTS

Table: 1 Postnatal Mothers' Characteristics (N=40)

S. No	Variables	Dry Heat		Moist Heat	
		Frequency	Percentage	Frequency	Percentage
1.	**Age (in years)**				
	a. < 20	03	15.0	01	5.0
	b. 21 – 25	11	55.0	12	60.0
	c. 26 – 30	06	30.0	07	35.0
2.	**Type of family**				
	a. Nuclear	08	40.0	12	60.0
	b. Joint	12	60.0	8	40.0
3.	**Educational Status**				
	a. No formal Education	5	25.0	6	30.0
	b. Primary	1	5.0	5	25.0
	c. Middle	6	30.0	7	35.0
	d. Secondary	1	5.0	2	10.0
	e. Hr. Secondary	4	20.0	-	-
	f. Graduates & Above	3	15.0	-	-
4.	**Occupation**				
	a. Housewife	14	70.0	17	85.0
	b. Unskilled worker	4	20.0	3	15.0
	c. Skilled labour	1	5.0	-	-
	d. Professional	1	5.0	-	-
5.	**Habitant**				
	a. Urban	9	45.0	10	50.0
	b. Sub urban	5	25.0	8	40.0
	c. Rural	6	30.0	2	10.0
	d. Slum	-	-	-	-
6.	**Social Support**				
	a. Yes	20	100.0	20	100.0
	b. No	-	-	-	-
7.	**Source of support**				
	a. Husband	2	10.0	4	20.0
	b. Maternal Relatives	17	85.0	16	80.0
	c. In-laws	1	5.0	-	-

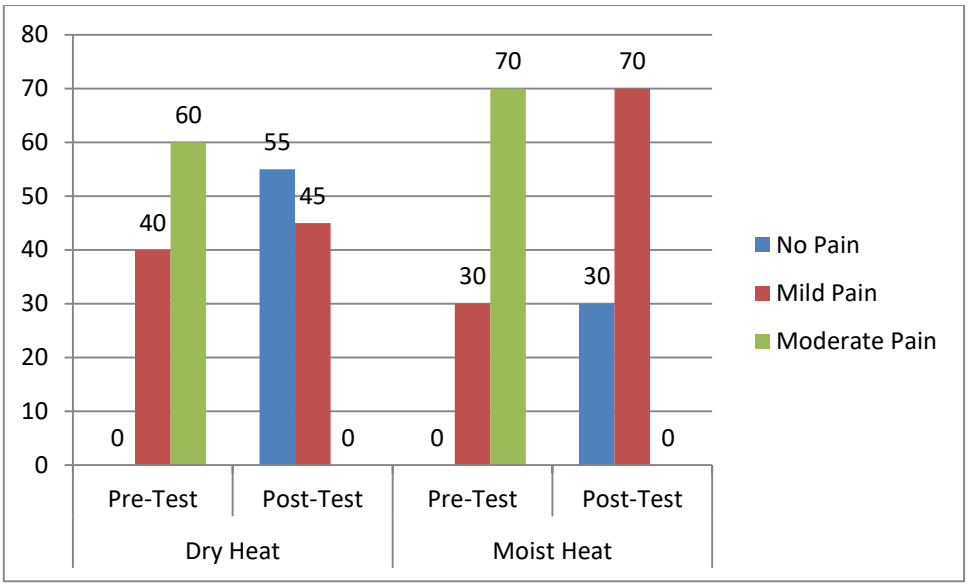

Fig 1: Pain intensity in both dry heat and moist heat application groups

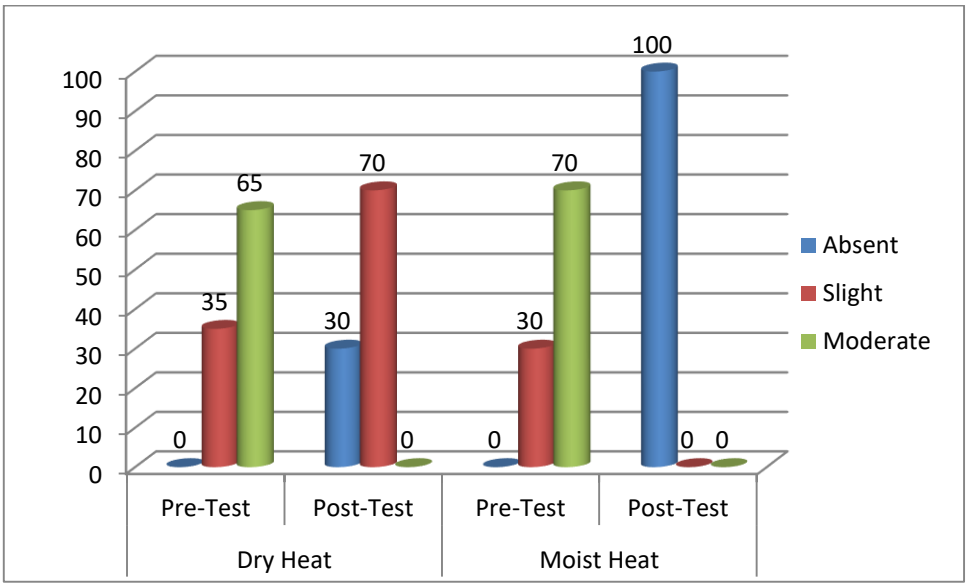

Fig 2: Breast Engorgement in both dry heat and moist heat application groups

DISCUSSION:

Fig1. Results showed that in dry heat group pre-test majority 12(60%) had moderate pain and 08(0%) had mild pain while in post-test majority 11(55%) had no pain and 9 (45%) had moderate pain. In moist heat group in pre-test maximum 14 (70%) had moderate pain and 6 (30%) had mild pain while in post-test majority 14 (70%) had mild pain while in post-test 6 (30%) had no pain. This result was supported by Moumita M et al (2017) conducted a study to compare the effectiveness between hot fomentation and cold compression as the treatment of breast engorgement. Using non probability purposive sampling technique 60 postnatal mothers from selected hospitals of Pune were enrolled for the study. Average reduction in pain intensity in moist heat group was 6.1 which were 4.9 in dry heat group. Reduction in pain intensity score of moist heat group was significantly higher than that for dry heat group (p=0.001). [10]

Fig2. Results showed that in dry heat group in pre-test majority 13(65%) had moderate breast engorgement and 7(35%) had slight breast engorgement in while in post-test majority 14(70%) had moderate breast engorgement and 6 (30%) had slight breast engorgement. In moist heat in pre-test maximum 14 (70%) had moderate breast engorgement and 6 (30%) had slight breast engorgement while in post-test majority 20 (100%) had slight breast engorgement. This result was supported by Alshakhs F H et al conducted a study to evaluate the effect of alternating application of Cold and Hot Compresses on Reduction of Breast Engorgement among lactating mothers compare the effectiveness between hot fomentation and cold compression as the treatment of breast engorgement. Average reduction in breast engorgement

score in cold compression group was 3.6 which were 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). (11)

CONCLUSION

Moist heat was found more effective in reduction of breast engorgement whereas dry heat was found more effective in reduction of pain intensity score due to breast engorgement among postnatal mothers. Women should be encouraged to use moist heat as an alternative treatment to reduce engorgement and promote comfort and reduce pain.

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