

A QUASI-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF BREAST MASSAGING SESSIONS ON PREVENTION OF BREAST ENGORGEMENT AMONG PRIMIPARA MOTHERS ADMITTED IN SELECTED HOSPITALS OF DISTRICT MOHALI, PUNJAB.

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ABSTRACT:

Introduction : Breast massage is a technique which includes rolling, stroking and shaking the breast to increase blood circulation. It is the easiest, readily available and cheapest method. Breast massage helps in reducing engorgement which reduces the breast pain as well as blood congestion in the mother's breast.

Material & Method : A Quasi-experimental post test only control group design was used. Eighty primipara postnatal mothers were selected by using convenient sampling technique from the Civil hospital phase VI, Mohali and Civil hospital, Kharar, Punjab.

Result : The findings of the present study showed that breast massaging sessions were highly effective to prevent breast engorgement among primipara mothers.

Conclusion : The present study concluded that breast massaging sessions were highly effective to prevent breast engorgement among primipara mothers. Breast massage is easy to practice, painless, soothing and can enhance comfort to mothers in the postnatal period. Hence, breast massage can easily be adopted as a preventive measure for breast engorgement.

Keywords: Breast massaging sessions, breast engorgement, primipara mothers

INTRODUCTION

Birth is the beautiful gateway for new life coming into the world. It can be a terrifying, magical or totally surprising experience. Sometimes it is all of these things at once. One thing is certain that it is completely unique for every woman who goes through it.¹ Motherhood is a wonderful process. It is the magic of creation.² Mother is placed at the level of God to provide love, warmth and satisfy needs of a baby. It is usually a joyful event, when a woman gives birth to a baby, despite tremendous pain and discomfort.³

Mother is the one who deals with overall growth and development of newborn baby. Breast feeding is an ideal method suited for the psychological and physiological needs of an infant. Breast feeding is the best way to feed baby as it offers a lot more than just nutrition, such as immunity-boosting antibodies. However, there are several challenges that the mother will face when breast feeding her baby. Some common

problems related to breast feeding are poor supply of milk, leaking breasts, inverted nipples, breast engorgement, nipple pain/trauma, nipple infections etc. Breast engorgement is a painful congestion of the breasts with milk that can make it difficult for the baby to latch on to the mother's breast properly. 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. It may lead to decreased milk supply, mastitis and inflammation of the breast.⁴ Massage is generally considered as a part of complementary and integrative medicines. Some studies found that massage is helpful for headaches, sport injuries, insomnia related stress, soft tissue strains or injuries etcetera.⁵ Breast massage is a technique which includes rolling, stroking and shaking the breast to increase blood circulation. Before nursing, gentle massage toward the nipple allow some milk to flow out and help

to soften the nipple for easier latch. During nursing, gentle compress and massaging stimulate the letdown of milk. It is the easiest, readily available and cheapest method. Breast massage helps in reducing engorgement which reduces the breast pain as well as blood congestion in the mother's breast.⁶

RESEARCH STATEMENT

“A quasi-experimental study to assess the effectiveness of breast massaging sessions on prevention of breast engorgement among primipara mothers admitted in selected hospitals of district Mohali, Punjab”.

OBJECTIVES

1. To plan and conduct breast massaging sessions among primipara mothers in an experimental group.
2. To assess breast engorgement after breast massaging sessions in an experimental group.
3. To evaluate the effectiveness of breast massaging sessions on prevention of breast engorgement.
4. To associate the findings with selected socio-demographic variables.

OPERATIONAL DEFINITIONS

Effectiveness: It refers to the outcome of breast massaging sessions on prevention of breast engorgement using self-structured breast engorgement assessment scale.

Breast massaging session: The term refers to massaging both breasts gently after feeding by using finger pads and moving in circular motion from chest wall towards nipple for 10 minutes (5 minutes on each breast) twice a day for 3 days.

Prevention: It refers to decreasing the risk of breast engorgement among primipara mothers.

Breast engorgement: Breast engorgement refers to hardness, pain, warmth, heaviness and difficulty in free flow of milk during breast feeding sessions in one or both breasts assessed by self-structured breast engorgement assessment scale.

Primipara mothers: It refers to primiparous women after normal vaginal delivery with or without episiotomy on postnatal day 0, day 1 and day 2, excluding first 6 hours after delivery.

METHODOLOGY

RESEARCH APPROACH: A quantitative research approach was adopted for the study.

RESEARCH DESIGN: Quasi-experimental post test

only control group design was considered appropriate for the study.

SETTING OF THE STUDY: Study was conducted in Civil hospitals of phase VI, Mohali and Kharar.

TARGET POPULATION: Target Population comprised of primipara postnatal mothers admitted in selected hospitals of district Mohali, Punjab.

SAMPLING TECHNIQUE: Non probability convenient sampling technique was used for the study.

CRITERIA FOR SAMPLE SELECTION

The inclusion as well as exclusion criteria used for the present study is as follow:

Inclusion criteria: The study included primipara mothers:

1. admitted in selected hospitals of district Mohali, Punjab.
2. willing to participate in the study.
3. able to understand and communicate in Punjabi/ Hindi or English.
4. who underwent normal vaginal delivery with or without episiotomy.
5. who were available on postnatal day 0, day 1 and day 2 at the time of data collection.

Exclusion criteria: The study excluded primipara mothers:

1. within first 6 hours after childbirth.
2. with lower segment caesarean section.
3. who had any breast/s related complications.
4. already using any alternative or complementary therapy for prevention of breast engorgement.

DEVELOPMENT OF TOOL

The tool consisted of two sections. Section I consisted of selected socio-demographic variables and section II consisted of self-structured breast engorgement assessment scale.

Section I: Socio- demographic variables

This section consisted of 6 variables such as age, type of family, initiation of breast feeding after delivery, frequency of feeding, pattern of breast feeding at each time and birth weight of recently delivered baby in kilograms.

Section II: Self- structured breast engorgement assessment scale

This was a breast engorgement rating scale which consisted of 4 parameters. This section consisted of two parts; part A and part B. Part A was used to assess the

level of pain and part B was utilized to assess the level of integumentary changes, tenderness and firmness. The subjects were asked to mark their perceived pain level in part A. After assessment, the most appropriate findings were marked by the researcher in part B.

RESULT

Section I: Frequency and percentage distribution of socio-demographic variables among primipara mothers of both experimental and control group

According to age equal number of subjects was found in the age group of 19-22 years as well as 23-27 years in experimental group whereas the majority of subjects in control group were in the age group of 23-27 years.

With regard to type of family almost equal majority of the subjects were found in joint family among both experimental and control group.

Regarding initiation of breast feeding after delivery in both experimental and control group shows that majority of subjects initiate breast feeding within one hour after delivery.

According to frequency of feeding only 75% of subjects in experimental group and none of the subjects in control group had frequency of breast feeding less than 1 hourly.

Taking pattern of breast feeding at each time shows that 12.5% of subjects in experimental group and 15.0% in control group were feeding from one sided breast.

The birth weight of their babies illustrates that 52.5% of subjects in experimental group and 47.5% in control group were having 2.5-3 kg birth weight.

The obtained chi-square values of the groups show that there is no significant difference between the groups. It denotes that there is homogeneity between the groups.

SECTION II: Post- test level of breast engorgement among experimental and control group

N=80

Level of breast engorgement	Experimental group (n=40)		Control group (n=40)	
	f	%	f	%
No breast engorgement (0)	02	05	00	00
Mild (1-3)	33	82.5	01	2.5
Moderate (4-6)	05	12.5	20	50
Severe (7-9)	00	00	19	47.5

SECTION III: Unpaired t test showing effectiveness of breast massaging sessions on prevention of breast engorgement among experimental and control group

N=80

Groups	Mean	S. D	Unpaired t test	p-value
Experimental (n=40)	2.35	1.051		
Control (n=40)	6.55	1.501	14.494	0.000*

*significant

p ≤ 0.05

SECTION IV: a) Association between level of breast engorgement with selected socio-demographic variables in experimental group.

The chi- square revealed that there is no significant association found between the level of breast engorgement and selected socio-demographic variables such as age, type of family, initiation of breast feeding after delivery, frequency of feeding, pattern of breast feeding at each time and birth weight.

This shows that all socio-demographic variables do not have any impact on level of breast engorgement. Hence, hypothesis (H₁) was rejected.

b) Association between level of breast engorgement with selected socio-demographic variables in control group.

The chi- square revealed that there is no significant association found between the level of breast engorgement and selected socio-demographic variables such as age, type of family, initiation of breast feeding after delivery, frequency of feeding, pattern of breast feeding at each time and birth weight.

This shows that all socio-demographic variables do not have any impact on level of breast engorgement. Hence, hypothesis (H₂) was rejected.

IMPLICATIONS

Nursing practice

Breast massaging session is a safe and better modality which brings a higher level of satisfaction among primipara mothers. This intervention can bring level of breast engorgement prevention. Thus maternity nurse can implement the breast massaging sessions to promote exclusive breast feeding in the clinical area. The demonstration of breast massage can be proved more beneficial via health education to the breast feeding mothers in the community setting.

Nursing Education:

An application of breast massaging sessions on breast engorgement among primipara mothers can be introduced as an alternative therapy in nursing curriculum. To provide adequate clinical exposure for the students to give effective and safe nursing care to prevent breast engorgement among primipara mothers can be introduced. Nurse educators can highlight the non-pharmacological measures for prevention of level of breast engorgement, in the curriculum of basic nursing education as a part of postnatal care.

Nursing Administration:

Collaborative with governing bodies to formulate standard policies and protocols to emphasize nursing care in the postnatal mothers, a nurse administrator can conduct in-service programmes and continuing education programmes for prevention of level of breast engorgement as well as breast related postnatal complications through workshops, conferences, seminars or non-pharmacological methods.

Nursing Research:

As a nurse researcher, promote more researches related to prevention of various postnatal complications is highly implicated. Nursing research is an essential aspect of nursing education as it uplifts the professional norms and enhances the body of nursing knowledge.

The findings of the present study can be utilized by researcher to contribute the profession, to accumulate new knowledge regarding breast massaging sessions on prevention of breast engorgement.

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