Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/16259
DOI URL: http://dx.doi.org/10.21474/IJAR01/16259

RESEARCH ARTICLE

A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF BREAST MASSAGE IN REDUCING BREAST ENGORGEMENT AND PAIN AMONG POSTNATAL MOTHERS ADMITTED IN REGIONAL HOSPITAL UNA 2022

Dr. Varinder Kaur[1] and Mrs. Nisha Rani[2]

1. Professor Cum Principal, HIMCAPES College Of Nursing Badhera Una HP.
2. Assistant Professor, HIMCAPES College Of Nursing Badhera Una HP.

Manuscript Info

Manuscript History
Received: 15 December 2022
Final Accepted: 19 January 2023
Published: February 2023

Key words:-
Postnatal Mothers, Breast Engorgement, Pain

Abstract

Background: Breast engorgement is defined as "the swelling and distension of the breasts. The common causes of engorged breasts are congestion of fluid and blood in the breast. Adequate management of engorgement is important for successful long-term lactation. The goal of treatment of breast engorgement is to relieve discomfort and control swelling.

Objectives: The Investigator conducted the study with an objective to assess the effectiveness of breast massage in reducing breast engorgement and pain among postnatal mothers admitted regional hospital, Una.

Methodology: A Quantitative approach and quasi experimental research design was adopted to conduct the study. Sample of 50 postnatal women selected in postpartum ward in RH Una by purposive sampling techniques. The data is collected by semi structured questionnaire and universal pain assessment tool. The collected data was analysed and interpreted by using descriptive and inferential statistics.

Result- This study revealed that the mean of Breast engorgement pre- test in experimental group among postnatal mother 4. 16 . The mean percentage is 69. 3% and the SD is 1. 43. The mean of Breast engorgement pre- test in control group among postnatal mothers is 4. 12 ,The mean percentage is 68% and SD is 0. 745, The mean of breast pain pre- test in experimental group among postnatal mother 4. 79 ,The mean percentage is 49. 7% and the SD is 2. 026 . The mean of breast pain pre-test in control group among postnatal mother 4. 28, the mean percentage is 42. 8% and SD is 1. 59474, The mean of pre- test in experimental group among postnatal mother 1. 08 , the mean percentage is 30%and the SD is 0. 8164. The mean of pre- test in control group among postnatal mother 3. 24, the mean percentage is 54% and SD is the mean of post - test in experimental group among postnatal mother is 1. 08, The mean percentage is 10. 8 % and the SD is 1. 2219 .The mean of post- test in control group among postnatal mother 4. 64, the mean percentage is 46. 4 % and SD is 1. 97230.

Conclusion- The Study concluded that the massage shows good result on reliving engorgement and pain.

Corresponding Author:- Dr. Varinder Kaur
Address:- Professor Cum Principal, HIMCAPES College Of Nursing Badhera Una HP.

……

Background Of The Study:-

"Breast milk is the gift that can only be giving oneself"

Breast milk is the perfect food for normal neonate. It is the best gift a mother can give her baby. It contains all the nutrients for normal growth and development of the baby from the time of birth to first six month of life. Proper proportion and in a form that is easily digested and absorbed. Infants need to be given only exclusive breast feeding for the first six month of the life "If the winter comes can the spring before behind. "Great poet says that the spring is followed by winter. That reveals that the joy after suffering. But labor does not come to end with child birth. The mothers do suffer much difficulty after childbirth. Child birth is a process beautifully designed by nature and care following the birth of the baby also essential for maintenance of health of both mother and child. Child birth is a transcendent event with meaning far beyond the actual physiological process. The primipara mother and the mother with inelastic breast are likely to be involved in breast complication. The factors like exaggerated normal venous and lymphatic enlargement of the breasts which precedes lactations in turn prevents escape of milk from the lacteal system leads to engorgement of breast[(1)]

The mammary gland is the milk producing gland which is composed largely of fat. Breast the mammary glands are accessory glands of the female reproductive system. The breast consist of varying amount of glandular tissue responsiblefor milk production, supported by fatty tissue fibrous connective tissue and that anchor the breast of the chest wall. Each breast contains about 20 lobes each of which contains a number of glandular structure called lobules where milk is produced. Supporting fatty and connective tissue run through the breast surroundedthe lobules and the breast itself is covered in subcutaneous fat in the lactating breast, glandular tissue proliferate to support milk production and reduce after milk production stop. The nipple in a small conical eminence at the center of the breast surrounding by a pigmented area the areola on the surface of the areola numerous sebaceous glands which lubricate the nipple during lactation. [(2)]

There are two type of hormone that directly affects the breastfeeding –prolactin and oxytocin. Prolactin seems to make a mother feel relaxed and sleepy, so she usually rests well even if she breastfeed at night. Suckling affect the release of other pituitary hormones, including gonadotropin releasing hormone [GnRH], follicle stimulating hormone, which result s in the suppression of ovulation and menstruation. Therefore, frequent breastfeeding can help to delay a new pregnancy. Breastfeeding at night is important to ensure this effect. Oxytocin makes the myoepithelial cells around the alveoli contract. This makes the milk, which has collected in the alveoli, flow along and fill ducts. Sometime the milk is ejected in fine streams. The oxytocin reflex is also sometimes called letdown reflex. or the milk ejection reflex. Oxytocin is produced more quickly than prolactin. It makes the milk that is already in the breast flow for the current feed, and help the baby to get the milk easily. Oxytocin starts working when a mother expects a feed as well as when the baby is suckling thereflex become condition t the mother sensation and feelings, such as touching smelling and seeing her baby, or hearing her baby cry [(3)]. The prolactin tells the milk gland in the breast to make more breast milk, and the oxytocin is responsible for getting the breast milk from the breast to baby. As long as continue to breastfeed very often, then the body will continue to release prolactin, and mother will continue to make milk.[(4)] Breast engorgement and nipples are the complication associated with breastfeeding and consider as the most significant factors impacting on breast feeding in the first weekof motherhood. There can be mild engorgement in which the breast is swollen, firm and with mild pain. Moderate breast engorgement in which the breast is heavy and slightly warm with moderate pain. Severely engorged breast is expanded, firm, glossy, warm and slightly uneven to touch. A severely engorged breast can prevent a neonate from feeding properly because he cannot latch on to the nipple of the rigid breast. Severe engorgement may decrease in milk production and interfere with the health of the mother which if not treated may stop the production of mothers milk and leads to the weaning process. Engorgement and milk stasis often precedes mastitis. Affected mother‟ s milk might salty that usual because of increase of sodium level with in the swallow and inflamed tissue. The neonate will notice the change and stop feeding. The goal to relive the breast engorgement is to relieve pain, discomfort control swelling to prevent engorgement and to enhance early breastfeeding. Proper and timely management of breast engorgement can leads to successful long term lactation. It can include analgesic, ice packs an uplift support bra to minimized edema, breast massage, gel packs, GuaSha therapy, breast binding, application of warmth cool compression, hand expression and use of breast pumps and cold cabbage leaves also used to reduce swelling in moderate to severe engorgement. [(5)]

Breast massage referred to a technique in which the engorged breast is kneaded, rubbed and applied squeezing strokes to soft tissue of the breast to increase lymph and blood circulation. Before, nursing gentle massage towards the nipple

allow some milk to flow out and help to soften the nipples for easier latch. It is the easiest and cheapest method. Inverted nipples can be easily cured by following right techniques. Massage controls the blood circulation and tissues fluid circulation. Breast massage help in reducing the engorgement; it reduce the breast pain as well as blood congestion in the mothers breast. Breast massage increases the sweetness in the mother‟ s milk. It improves circulation, increasesgood quality of mother‟ s milk with increase ph. A sweet liquid increase the sucking response in the infant. If we ignore the breast engorgement it will lead to mastitis and breast abscess during the postnatal period and adequate management is fundamental, if not treated it will leads to early warning.(6)

Need For Study

The theme of the national breastfeeding week according to WHO "Everyone has a part to play in helping mums to breastfeed" the key focus will be the difference that can be made if everyone supportbreastfeeding. The prevalence of breast engorgement among postnatal women is 57-67%. Breast engorgement is swelling, tightness and increases size of breast, it usually occurs in the early days of breastfeeding between day 3 and 5, and may occurs as late as day 9 – 10, moderately severe breast engorgement result in hard, full tense, warm and tender breasts with throbbing and aching pain.(7) The main causes of breast engorgement is if baby is not feeding and attaching well and breast is not drained well during a feed, if baby misses a feed or is feeding infrequently, if more milk produce then the need of the baby and sometimes it is due to increased breast milk and blood pressure. The symptoms of breast engorgement are that the breast feels very full, hard swollen and painful, and the nipple is flat and tight. The breast is engorged if the mother is unable to feed the baby frequently or thoroughly enough to drain the breast in the first few days after birth. This is very important even though only a small amount of milk production right after delivery (8)

Engorgement can make it difficult for the baby to breast feed effectively. The rise in circulating prolactin acts upon the alveoli of the breast and stimulate milk production during the first 3-4 days of puerperium of the breast become heavy and engorged. The breast is hard, painful and sometime flushed. The areola will typically feel hard rather than soft, with tight skin that may appear shiny. The nipple may increase in diameter and become flat and taut, making a latch on challenging. (9)

Global incidence of lactation mastitis vary as low as 2% and up to 50%. Mastitis is an inflammation of the breast that is most commonly caused by milk stasis rather than infection. Non-infectious mastitis can usually be resolved without the use of antibiotics. "Without effective removal of milk, non-infectious mastitis was likely to progress to infectious mastitis, and infectious mastitis to the formation of an abscess." A recent study from Glasgow suggests an incidence of 18%. In approximately 3% of those with mastitis a breast abscess may result in complication. As milk production increases, over-distention of the alveoli causes the milk secreting cells to become flattened & occlude the capillary blood circulation surrounding the alveolar cells. Congestion contributes to edema & obstructs, lymphatic drainage of the breasts, stagnating the system that rid the breasts of toxins, bacteria, & leading to mastitis. In very severe cases can cause numbness or tingling of the hands from pressure on the nerves. In addition, a protein called the feedback inhibitor of lactation (FIL) accumulates in the mammary gland during milk stasis. It acts as a major trigger of apoptosis, that causes involution of the milk- secreting gland, collapse of the alveolar structures and the cessation of milk production. Engorgement may lead to mastitis. Sub areolar tissue resistance also increases during engorgement and results in latching difficulty. According to the Academy of Breastfeeding Medicine Protocol Committee and Barrens, breast engorgement is defined as "the swelling and distension of the breasts, usually in the early days of initiation of lactation, caused by vascular dilatation as well as the arrival of the early milk."(10)**The Researcher Felt the need** to assess the effectiveness of breast massage in reducing breast engorgement and pain among postnatal mothers.

Research Methdology:-

Research Approach:

Quantitative approach used to assess effectiveness of breast massage to reduce the breast engorgement and pain among postnatal mothers.

Research design:

Quasi experimental design is used to assess the effectiveness of breast massage to reduce the breast engorgement and pain among postnatal mothers.

Research Setting:

The study was conducted at regional hospital Una (H. P)

Population:
All postnatal women admitted at regional hospital Una (H. P)

Sample And Sampling Techniques:
Sample consists of 50 postnatal women admitted in postpartum ward. A purposive sampling technique is used to select the sample.

Criteria For Sample SelectionInclusion Criteria:
The postnatal women:
1. Who are willing to participate in the study?
2. Who were able to understand and communicate Hindi or English?
3. Who were present at the time of data collection?

Exclusion Criteria
1. The women who were pregnant.
2. The women who were sick at the time of data collection.

Description Of Tool
The present study aims to assess the effectiveness of breast massage to reduce the breast engorgement among and pain postnatal mothers. The following data collection tool was constructed in order to assess the effectiveness of breast massage to reduction the breast engorgement among postnatal mothers.

SECTION 1:
Age, Religion, Education, occupation, Family Type, Monthly income, Health facility, Types of Delivery, Time of feeding started, previous problem related to breast, Postnatal Day, Gravida.

Section 2: Six Point Engorgement Scale
The scale was formulated by Hill and Humenick (Pamela. D. Hill and Sharron. S. Humenick) in the year 1994. This is a standardized scale used to assess the severity of breast engorgement Standardized tool consist of six criteria regarding breast engorgement. The criteria under appearance of breast includes, soft, no change in the breast, slight changes in the breast firm, beginning tender in the breast,firm tender, very firm and very tender.

Scoring Procedure Section –B
Assessing the level of breast engorgement among postnatal mothers. When the breast is soft, score 1 is given. When breast is having slight changes score 2 is given. When the breast is firm, non-tender it carry score 3. When the breast is firm,beginning tenderness it carry score 4 is given Firm, tender breast carry 5 score. Very firm, very tender breast carry 6 score.

Reliability Of 6 Point Breast Engorgement Tool
This was used to assess the severity of breast engorgement. The reliability has been recorded to be 0. 84.

Data Collection Procedure:
The data collection of the study was carried out in the month of May 2022. The investigator to commencing the task of data collection obtained permission from Medical officer of Una [H. P). Before starting the data collection the researcher introduce herself and rapport was develop p with the subject. Informed consent was taken. The need of the study and objective were explained to the subjects and confidentiality was ensured. The intervention was performed on the subject at three times in a day and the subjects were clarification in case of any doubt and the suitable explanation was given by the investigator.

Ethical Consideration
1. Written permission was taken from institutional ethical committee. 2. Written permission was taken from medical officer of regional hospital Una(H. P) 4. Informed consent was taken for each subject 5. Confidentiality and anonymity of responses was assured and maintained throughout study.

Plan of analysis:
Data analysis and interpretation was done on the basis of objective of the study. Descriptive statistical and inferential statistica was used for analysis.

Result:-

This study revealed that the mean of Breast engorgement pre- test in experimental group among postnatal mother 4. 16 . The mean percentage is 69. 3% and the SD is 1. 43. The meanof Breast engorgement pre- test in control group among postnatal mothers is 4. 12 ,The mean percentage is 68% and SD is 0. 745, The mean of breast pain pre-test in experimental group among postnatal mother 4. 79 ,The mean percentage is 49. 7% and the SD is 2. 026 . The mean of breast pain pre- test in control group among postnatal mother 4. 28, the mean percentage is 42. 8% and SD is 1. 59474, The mean of pre- test in experimental group among postnatal mother 1. 08 , the mean percentage is 30%and the SD is 0. 8164. The mean of pre- test in control group among postnatal mother 3. 24, the mean percentage is 54% and SD is the mean of post - test in experimental group among postnatal mother is 1. 08, The mean percentage is 10. 8 % and the SD is 1. 2219 .The mean of post- test in control group among postnatal mother 4. 64, the mean percentage is 46. 4 % and SD is1. 97230.

Conclusion:-

The Study concluded that the massage shows good result on reliving engorgement and pain.