Effect of Instruction Guideline on Relieving Breast Engorgement among Postnatal Mothers

Thesis

Submitted for Partial Fulfillment of Doctorate Degree in Nursing Science
Maternal and Neonatal Nursing

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2017

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Acknowledgment

All braise be to Allah and all thanks. He has guided and enabled me by his mercy to fulfill this thesis, which I hope to be beneficial for people.

I would like to express my sincere gratitude and appreciation to Prof. Dr. ***Nadia Mohamed Fahmy,*** *Professor of Maternal and gynecological nursing, Faculty of Nursing, Ain Shams University, for giving me honor to work under her meticulous supervision and for providing me a lot of encouragement and support throughout the study.*

I am extremely grateful to ***Dr. Randa Mohamed Ibrahim,*** *Assistance Professor of Maternal and gynecological nursing, Faculty of Nursing, Ain Shams University, for her continuous support, valuable assistance, best supervision and cooperation in all stage of this work.*

Iam deeply grateful to my family of their support & encouragement.

Finally yet important, I would like to thank and appreciate target group.

And every one has given me an unfading support and assistance

Content

LIST OF ABBREVIATIONS

- **WHO** : World Health Organization.
- **PRL** **:** prolactin
- **B.E** **:** Breast engorgement
- **IBC** : Inflammatory Breast Cancer
- **NPEB** : National Program to Encourage Breastfeeding
- **FBIBU** **:** Breastfeed initiative at Basic units
- **NPB** **:** National Policy of Breastfeeding
- **BFHI** : Baby-Friendly™ Hospital Initiative
- **WHO** **:** World Health Organization
- **UNICEF** : United Nations Children's Fund
- **RNAO** : Registered Nurses Association of Ontario
- **FIL** : feedback inhibitor of lactation
- **IV** **:** Intravenous fluids

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Abstract

Breast engorgement is a painful and unpleasant condition affecting large numbers of women in the early postpartum period. Breast engorgement may inhibit the development of successful breastfeeding, lead to early breastfeeding cessation, and is associated with more serious complications. **This study aimed** to evaluate the effect of instruction guideline on relieving breast engorgement. **A purposive study was conducted at** in patient postnatal units at Ain Shams Maternity University Hospital. **Two hundred forty six postnatal mothers** were recruited in the study through using **purposive technique** then using systematic simple random sample to assigned groups**. Three tools** of data collection were used first was interviewing questionnaire, while second tool Visual Analogue Scale (VAS), and third tool Six-point breast engorgement scale. **The result** of the study shows that there is significant improvement on knowledge of women in the group I, and II after using instruction guideline. Furthermore, there is highly statistical significant decrease in mean score of visual analogue scale of pain, and breast engorgement scale women in the group I, and II after using instruction guideline. **Conclusion and recommendations:** the study concluded that instruction guideline had positive effect on women knowledge regarding breast engorgement. Comparing between three groups, the results showed that hot application and cabbage leaves had effect of relieving degree of breast pain and engorgement after using guideline. While, there is no improvement in control group as regard degree of breast pain and engorgement. **Accordingly, the following recommendation is proposed:** developing a counseling program for women during immediate postpartum period about prevention and treatment of breast engorgement. Establishing follow up unit at postnatal unit in the hospital to facilitate the follow-up of cases "as all normal vaginal delivery cases drop out due to inability to follow them".

Key Words: breast engorgement, postnatal mothers, instruction guideline.

Introduction

Breast engorgement is a well-known but poorly researched aspect of lactation. The medical dictionary defines engorgement as congestion, distension with fluid. Engorgement as the physiologic condition characterized by painful swelling of the breasts associated with the sudden increase in milk volume, lymphatic and vascular congestion, and interstitial edema during the first two weeks following birth. Engorgement is a normal physiologic process with a progression of events, not a result of trauma or injury to tissues ***(Marti, 2014).***

On other hand, breast engorgement usually make changes in the breasts after baby is born. They will get larger, somewhat firm, and slightly tender as they start to make more milk. This is called postpartum breast engorgement ***(McKesson, 2014).***

Predicting an individual mother's risk for and course of engorgement may not be possible, but application of some general principles may be of help in anticipating situations that predispose to a higher risk. The following factors may place a mother at a higher risk of engorgement; failure to prevent or resolve milk stasis, small breast size , previous breastfeeding experience, mothers with high rates of milk, and limited mother/infant contact ***(Dewey, et al ., 2013).***

Breast engorgement is caused by an imbalance between milk supply and infant demand. It often occurs in women who decide not to breastfeed ***(Williams, 2014).*** Breast engorgement can occur due to main factors such as a suddenly increased milk production that is common during the first days after the baby is delivered or when the baby suddenly stops breastfeeding either because it is starting artificial feeding or the baby is ill and has a poor appetite. Breast engorgement

may also be caused when the mother does not nurse or pump the breast as much as usual ***(Mangesi, & Dowswell, , 2010).***

Accumulation of milk and the resulting engorgement are a major trigger of apoptosis, or programmed cell death, that causes involution of the milk-secreting gland, milk resorption, collapse of the alveolar structures, and the cessation of milk production ***(Williams, 2014).*** Severe breast engorgement can lead to the flattening of the nipples or, it can result in inverted nipples which make it impossible for the baby to suck out all the milk from the breast. This is one of the common causes of the stagnation of milk in the breast (***Swelstad, et al., 2016).***

Not all women experience breast engorgement after they give birth and some degree of engorgement of the breast is however normal within the few postpartum days. Women with mild to moderate hypoplastic breasts with a wide intramammary space (>1 inch) and a tubular shape are at particular risk for producing less than 50 percent of the milk necessary for the first week. More concerning are the moderate to severe degrees of breast engorgement. In these cases, the condition can continue for up to ten days or more even though the patients will experience serious symptoms only during the first six days (***Swelstad , et al., 2016).***

Engorgement is normal. However, the swelling of the breasts may make it hard for the baby to get milk. Baby may not be able to latch on correctly and nipples may get sore. If the baby is having trouble nursing, the pressure in breast from all of the milk can cause to make less milk or to even stop making milk. Knowing how to manage engorgement will help to avoid these problems ***(Prentice, 2012).***

Four patterns of engorgement have been described: a single experience of firm, tender breasts followed by a resolution

ofsymptoms; multiple peaks of engorgement followed by resolution; intense and painful engorgement lasting up to fourteen days; and minimal breast changes. These patterns demonstrate that the experience of engorgement is not the same for all mothers. Essentially, there are two types of breast engorgement, physiological and pathological ***(ARuba, 2011).***

The first signs of the condition are the swollen, firm and painful breasts. In more severe cases, the affected breast becomes very swollen, hard, shiny, warm, and slightly lumpy when touched ***(Neifert, et al ., 2012).*** The condition may cause edematous and flushed nipples. In cases when the breast is greatly engorged, the nipple is likely to retract into the areola. Commonly, patients experience loss of appetite, fatigues, weakness and chills " fever" may occur in 15%, but is typically less than 39 degrees C and lasts for less than one day ***(Menczer, & Eskin ,2013).***

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. It includes analgesics, ice packs, an uplift support bra to minimize edema & frequent nursing. New breastfeeding mothers have several options for relieving normal postpartum breast engorgement such as breast massage, application of warmth, cool compresses, and hand expression or use of a breast pump ***(Riedel, 2014).***

Nurse midwife play an important role in prevention and management of breast engorgement. An informative resource by midwife during the short birth facility stay plays an inevitable role in preventing and managing feeding problems like breast engorgement.

The education in the early postnatal period is effective as the mothers are more receptive at this time to any information if it is contributing to the welfare of the child ***(Shiya, 2012)***.

Regarding the work of nurses in the context of the National Policy of Breastfeeding, they must be prepared to prevent, recognize and resolve difficulties in nurturing and child interaction, especially when it comes to breastfeeding, such as the helping identify obstacles to their successful practice. Therefore, it's mandatory to keep the eyes open at those needs of nurturing, during lactation in hospital stay, so that they can be identified early and resolved, avoiding early weaning or the beginning of the mains supplement while only exclusive breastfeeding is important ***(Rodrigues ,et al 2014).***

Justification of Problem

There is lack of knowledge among the nursing women regarding the care they could take to avoid or treat engorged breasts, considering that approximately 57% do not know what can be done to relieve engorgement symptoms, 23.7% know hot compresses or massages, 11.7% refer to milking, 6.4% breastfeed, 0.8% use medications, and 0.4% suspend breastfeeding when there is breast engorgement.

Giving a single instruction along with the breast-feeding techniques before hospital discharge does not have a positive effect on the prevention of breast engorgement, as it affects 35.1% of women seven days after a single guiding session, and 37.8% 30 days after they receive the guidance. Women who have not received any breast-feeding guidance at all at the maternity present 34.3% and 36.5% of breast engorgement seven and thirty days after discharge, respectively. These data evidence the need for effective guidance about breast-