

***Effect of Pharmacological Versus Non-Pharmacological
Methods on Traumatic Nipples for Lactating
Mothers***

Thesis

Submitted for Partial Fulfillment of Doctorate in Nursing Science
(Maternity & Neonatal Nursing)

By

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List of Abbreviations

Abbreviation	Meaning
HPA	Highly Purified Anhyderous(lanolin)
NTS	Nipple Trauma Score
VAS	Visual Analogue Scale
WHO	World Health Organization
EBM	Expressed Breast Milk
APNO	All-Purpose Nipple Ointment
Vs	Versus

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Abstract

Nipples trauma are common during lactation and remain the major reason for failing to establish successful breastfeeding. **The aim of this study is** to evaluate the effect of pharmacological & non pharmacological methods on traumatic nipples for lactating mother. **Quasi-experimental** study was carried out at the Postnatal Maternity Unit at Ain Shams University Hospital. A **Purposive sample** technique was used to recruit 150 mothers complaining with nipple trauma, they were divided into 2 groups: 1st group used pharmacological method and 2nd group used non-pharmacological, based on the following criteria: all degrees of traumatic nipple, during the first three months after childbirth, different types of delivery, different parity, healthy women with healthy infants. **Data were collected** through three tools: a structured interview sheet developed to collect mothers' data and knowledge; Visual Analogue Scale conducted to assess pre/post intervention nipple pain; and Nipple Trauma Score (NTS) conducted to assess pre/post intervention traumatic nipple, in addition to Arabic educational leaflet. **The results** showed that, 99.3% of mothers didn't know correct breastfeeding position and 100% of them had poor knowledge regarding treatment of traumatic nipple. Majority of mothers, hadn't any reaction toward nipple trauma in the first days of delivery. No significant difference between two groups under study in relation to relieving nipple trauma. **The study concluded** that the use of lanolin, tea bag and breast milk could have the same effects on relieving traumatic nipple. **The recommendations:** developing a counseling program for women during pregnancy and immediate postpartum period about prevention and treatment of traumatic nipple. An education center should be available at inpatient postnatal unit in the hospital to facilitate followup of cases. Establishing of breast feeding support group. conducting further prior research to determine factors affecting treatment of nipple trauma.

Keywords: breastfeeding, nipple trauma, treatment.

INTRODUCTION

‘Nipple trauma’ can be defined as a condition of discontinuity of the nipple or areola that is caused by fissures, scrapes, erosions, lacerations, and vesicles, thus hampering the breastfeeding process as a result of discomfort and pain. Nipple pain is not normally a part of breastfeeding. Nipples may be sensitive in the first few days after birth and while breastfeeding, but sore nipples indicate a problem. If the mother feels pain, she should seek help immediately to avoid further nipple trauma (*Pereira et al., 2009*).

Nipple trauma (damaged and painful nipples) are among the most common reasons that women give for abandoning breastfeeding. Underlying the problems of damaged (‘cracked’ and sore nipples) are incorrect attachment (relationship of the baby’s mouth with the mother’s breast) and positioning (relationship of the baby’s body axis to the mother’s body axis) (*Audrey et al., 2009*).

Sore nipples are one of the most common reasons for women discontinuing breastfeeding in the early postpartum

period. Although some research has suggested that nipple changes in the first weeks of breastfeeding are common and normal, more often, faulty breastfeeding techniques, including improper positioning, latch-on, and artificial nipple use, are implicated in nipple trauma and pain. Staphylococcus infection is also associated with sore, cracked nipples. Oral anomalies, including ankyloglossia, and suckling disorders in the infant have also been implicated in the development of sore nipples(*(Blair et al., 2003)*).

The management of nipple pain and/or trauma is associated with breastfeeding according to the Best Evidence-Based Practice Information Sheets which have been derived from a systematic review of research published by the Joanna Briggs Institute include (Teabag Compress, Water Compress, Lanolin, Hydrogel Dressing, Breast Shells, Breastfeeding Technique, Ointments and breast milk) (*Page et al., 2009*). Breast milk as an anti-inflammatory agent, also contains antimicrobial factors, such as acetylhydrolase and lactoferrin, that protect against infection (*Gartner et al., 2005*).

As far as pharmacological methods are concerned, topical applications identified in the literature and advocated by health

care professionals at different times include a variety of topical interventions which have been advocated for the treatment of nipple pain. Creams and solutions are applied to act either as a barrier, moisturizer, or to dry out and toughen the skin. Other topical applications include masse cream, chamomile ointment, hydrous lanolin, stilboestrol cream, silicone barrier cream (*Dennis et al., 2012*).

Lanolin has been recommended for healing nipple traumas due to its effect on the formation of a barrier that prevents losing the natural moistness of deeper skin layers. Thus, it increases cellular growth and is indicated to stimulate the healing process and pain relief. It can be suitably absorbed by the mucous membrane and/ or by ingestion. In other words, there is no need to remove it before breastfeeding (*Wilson, 2010*).

Nursing mothers are choosing non-pharmacological methods, such as natural and holistic remedies to relieve the pain and discomfort of breastfeeding problems naturally. Herbal remedies are safe to use without the unwanted side effects of conventional medication. Mothers are, thus, assured that their babies are not ingesting any harmful medications.

Herbs, such as tea bags, prevent damage and infection and encourage healing of any cracks in the nipple and speed up the healing process and, therefore, will be used in this study (*AlternativeHealingAcademy.com.2010*)

In some locations, wet tea bags remain a popular folk remedy for the treatment of nipple pain. They are inexpensive and can be found in most homes, which makes them easily accessible at the onset of difficulties. They may be soothing because of the moist warmth. Tea bags (warm, moistened) have been recommended for treatment of sore nipples for many years. They contain tannic acid (an astringent) which has anti-inflammatory properties (*Morland- Schulz & Hill, 2005*).

The best intervention for alleviating nipple trauma in nursing mothers is education on proper positioning and attachment of the infant according to a systematic review of randomized controlled trials. A midwife/nurse will be present at the first feed to help with attachment and provide reassurance and encouragement. It is important to get this correct from the first feed to assist in the prevention of incorrect attachment and associated problems. Encouraging frequent feeding during these first days will minimize

engorgement and help baby to establish the best attachment that leads to prevention and management of nipple trauma (*Australian Breastfeeding Association 2009*).

Justification of the study

It is a dream for most mothers to have comfort in breastfeeding, but nipple trauma are still a common problem, for pain or cracks frequently occur after breastfeeding and may resort to premature weaning. When the nipples are hurt, breastfeeding is in jeopardy(*Brent, 2010*). Globally, infant morbidity and mortality ratio have been significantly reduced with the exclusive breast feeding practices for initial 6 months and up to 2 years of age. “UNICEF recently noted that the reduction of child deaths from 13 million globally in 1990 to 8.8 million in 2008 is partly due to the adoption of basic health interventions such as early and exclusive breast feeding" (*Abdullah, 2010*).

Aim of The Study

This Study Aimed to:

Evaluate the effect of pharmacological & non pharmacological methods on traumatic nipples for lactating mother through:

- Assess the level of traumatic nipples before intervention.
- Implement of pharmacological methods versus nonpharmacological methods for relieving traumatic nipples .
- Evaluate the effect of intervention on traumatic nipples.

Hypotheses :

There is a positive effect of using non-pharmacological versus pharmacological therapy on traumatic nipple for lactating mother

.