

# **RESEARCH ARTICLE**

#### EFFECT OF FOOT REFLEXOLOGY ON LACTATION- A PILOT STUDY.

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# Manuscript Info

Abstract

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*Key words:*lactation, postnatal women, foot reflexology.

#### **Introduction and background:** The postpartum period is started after the delivery of the fetus and this period is about 6 weeks to 8 weeks. In this period, mother undergoes with have many changes such as emotionally and physiologically and learns how to do adjust with this type of problems. During this time Mother produces breast milk which is secreted by mammary glands located within the fatty tissue of the breast, called as Lactation. Breast milk is a most important form of nutrient for the new born. Most of the women are able to produce enough breast milk but some women are unable to produce enough breast milk because of many factors such as stress, fatigue, anxiety. This study was conducted to evaluate the effect of foot reflexology on lactation among postnatal women.

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**Methodology:** The research approach used was quantitative approach. Quasi experimental, Pretest posttest control group design was used. The study was conducted for 10 postnatal women of central Gujarat were conveniently selected (experimental group (5) and control group (5)). The tool of data collection included a Bio-demographic and maternal variables Performa and LATCH assessment tool. The intervention given to postnatal women by application of pressure with the thumb and index finger by acupressure thumb on the big toe of the each foot for 10 minutes each with a rest interval of 5 minutes in between each feet pressure session for 3 consecutive days. In control group, the foot reflexology did not administer.

**Result:** The data was analyzed by using descriptive and inferential statistics. The study result shown that there was increase in mean score of lactation after application of foot reflexology. In LATCH assessment tool the result showed increase in all the parameters from pre-treatment mean score to post- treatment mean score which was latch (before 0.80, after 1.80), audible swallowing (before 0.60, after 1.60), type of nipple (before 1.60, after 2.00), comfort (before 2.00, after 2.00) and hold (before 1.40, after 1.80).

**Conclusion:** Hence, the study concluded that there is a positive impact of foot reflexology on lactation. There is a significantly increase lactation among postnatal women after application of foot reflexology.

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#### Introduction:-

The postpartum period define as the time after delivery when maternal physiological changes related to pregnancy return to the nonpregnant state. It is also known as puerperium. To add more, medical issues also may raise up during this period with physiologic changes.<sup>1</sup>

The process of milk production is called as lactation. The fatty tissue of the breast which consist mammary gland secretes milk. The hormone oxytocin which is secreted by posterior pituitary gland is responsible for uterine contraction and lactation after birth of baby. During first 3 days of puerperium, colostrum is delivered from mother. It is specifically high in antibodies, nutrients and fats, which helps to protect baby from infection. In the next, the hormone prolactin mainly controlled the amount of milk production, which depends on length of time in which baby sucks breast.<sup>2</sup>

The medical condition, in which lactation is insufficient or fails completely because of an inadequate breast milk production and/or failure of the milk let-down reflex in response to sucking of the new born baby, as a result the ability of proper breastfeeding is drastically reduced called lactation failure or deficiency, also known as agalactia or agalactorrhea, as well as hypogalactia or hypogalactorrhea.<sup>3</sup> Sheehan's syndrome (postpartum hypopituitarism due to blood loss and hypovolemia during and after childbirth), hormone deficiency and hypopituitarism are major general reasons of lactation failure.<sup>3</sup>

There are many pharmacological and non-pharmacological methods for improve lactation, Now a days people are mostly going for non-pharmacological management rather than pharmacological management. Because non pharmacological methods take longer time to cure but it gives accurate result and completely relieve from the problem.

# Material And Methods:-

The research approach used was quantitative approach. Quasi experimental, Pretest post-test control group design was used. The study was conducted for 10 postnatal women, were selected (experimental group (5) and control group (5)) using convenient non-probability sampling technique. The tool used for gathering data include Bio demographic variables LATCH assessment tool

Pre assessment for lactation done for both experimental and control group. Foot reflexology administered to experimental group by application of pressure with the thumb and index finger by acupressure thumb on the big toe of the each foot for 10 minutes each with a rest interval of 5 minutes in between each feet pressure session for 3 consecutive days. In control group, the foot reflexology did not administer.

## **Result:-**

The data was analyzed by using descriptive and inferential statistics. The study result shown that there was increase in mean score of lactation after application of foot reflexology. In LATCH assessment tool the result showed increase in all the parameters from pre-treatment mean score to post- treatment mean score which was latch (before 0.80, after 1.80), audible swallowing (before 0.60, after 1.60), type of nipple (before 1.60, after 2.00), comfort (before 2.00, after 2.00) and hold (before 1.40, after 1.80).

Item	Experimental Group			Control group		
	Mean	Wilcoxon	P value	Mean	Wilcoxon	P value
		value			value	
Latch Pre Day 1	0.80	1.89	0.059	0.80	1.732	0.083
Latch Post Day 3	1.80	1.89	0.059	1.40	1.732	0.083
Audible Swallowing Pre Day 1	0.60	1.89	0.059	0.60	1.414	0.157
Audible Swallowing Post Day 3	1.60	1.89	0.059	1.00	1.414	0.157
Type Of Nipple Pre Day 1	1.60	1.414	0.157	1.60	1	0.317
Type Of Nipple Post Day 3	2.00	1.414	0.157	1.80	1	0.317
Comfort Pre Day 1	2.00	0	1	2.00	0	1
Comfort Post Day 3	2.00	0	1	2.00	0	1

Table 1:-Comparison between day1 and day 3 for experimental group and control group.

Hold Pre Day 1	1.40	1.414	0.157	1.20	1.414	0.157
Hold Post Day 3	1.80	1.414	0.157	1.60	1.414	0.157

## **Conclusion:-**

The present study conducted only on 10 postnatal women (5 experimental and 5 control) which was given a new sight about one of the non-pharmacological method to improve lactation so similar study can be perform on larger scale to make it generalized and in determining the impact of foot reflexology on improve lactation. The postnatal women and also the people should be aware about the use of such measure which helps to improve lactation.

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