

Effectiveness of Reflex Zone Therapy on Lactation Between Normal Vaginal Delivery and Lower Segment Cesarean Section in Thiruvallur Government Hospital at Thiruvallur

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Abstract: Reflexology as an effective tool in relaxing mothers allowing a more nurtured body, mind and spirit, which is in term helps establish and maintain lactation. Breast feeding has many health and developmental advantages for infant and mothers. Breast milk is the best nutritional source for baby and it provides immunity. About 40% of infants 0-6 months old are exclusively breast feed. Over 820 000 children lives could be saved every year among children under five years, if children 0-23 months were optimally breast feed. An interventional study was conducted to assess the effect of reflex zone stimulation on lactation among normal vaginal delivery and cesarean delivery at Thiruvallur government hospital, Thiruvallur. Quantitative, pre-experimental pre test, post test design was adopted and purposive sample of 30 mothers in experimental group I and 30 mothers in experimental group II who were in the first post-operative day and out of the effect of anesthesia were included for the study. Informed consent was obtained from the selected mothers after brief explanation of the study and intervention. A pre-test was done using the LATCH breast feeding assessment scale. After the pre test the post test was an reflex zone stimulation was applied to the postnatal mothers, 20 minutes morning, afternoon and evening for three consecutive days. The findings of the study reveal that application of reflex zone therapy is effective in initiation of breast milk secretion and promotion of breastfeeding. The findings proved that reflex zone stimulation was very effective to improve the level of lactation among postnatal mothers.

Keywords: Reflex zone therapy, effectiveness, lactation, LATCH breastfeeding assessment scale, postnatal mothers.

1. Introduction

Lactation is benefit for the postnatal mother's health and it gives nourishments, growth and development to the baby. Breast milk is nature most precious gift to the new born babies. It has been shown that breast milk decreases rate of common infections even in pre term babies. Exclusive breast feeding for initial six months is an important tool to reduce infant mortality rate in the developing countries [1].

Reflexology is an treatment in which the pressure is applied to areas in the hands, feet, and ears. Pressing these areas will restore balance to the body and result in the secretion of

hormones or digestive enzymes. Reflexology has stimulating effects on the central nervous system and mood effects and causes deep relaxation and thus reducing the mental stress and pressure and improving blood flow [2].

According to WHO about 820 000 child lives would be saved every year if breast feeding scaled in universal level. Under six month of age only 40% of infants are taking exclusively breast feeding. Lactation is process of milk production, hormone oxytocin begins the lactation process and it cause uterine contractions after birth. Prolactin hormone stimulates the mammary glands to produce breast milk [3].

Reflex zone stimulation is an effective method for breast milk secretion. This method is useful for post caesarean mothers to prevent the use of drugs in lactation that may harm to the baby [4]. Motherhood play a very important role in child birth and lactation. Reflexology work on pressure points on feet, human feet consists of 10 zones each zone reflect each organ like eyes, nose, breast, stomach, in our body. By giving pressure on the toe it gives signal to hypothalamus it stimulates pituitary gland and produce oxytocin which helps to increase breast milk [5].

Lactation is defined as a production of colostrums and milk in the breast milk of the woman. Lactation is under the control of numerous exocrine glands particularly the pituitary hormones prolactin and oxytocin [6]. A specialized branch of reflexology, maternity reflexology attempts to help woman from conception and fertility to pregnancy and labor.

2. Objectives

- Assess the effectiveness of lactation on reflex zone therapy among primi mothers.
- To compare the level of lactation normal vaginal delivery and lower segment caesarean section delivery.
- To associate the selected demographic variable with the level of lactation among primi mothers.

3. Material and methods

Quantitative, pre- experimental design was adopted with one group pre and post design for the study. The amount of breast milk secretion was assessed by modified latch breastfeeding assessment tool and intervention was given reflex zone therapy (foot massage). 60 samples were selected with purposive sampling technique, 30 samples from experimental group I LSCS and 30 samples from experimental group II normal delivery. The pre test was assessed by LATCH breast feeding assessment scale and after the pre test, the post test was given reflex zone therapy (foot massage) to improve the lactation.

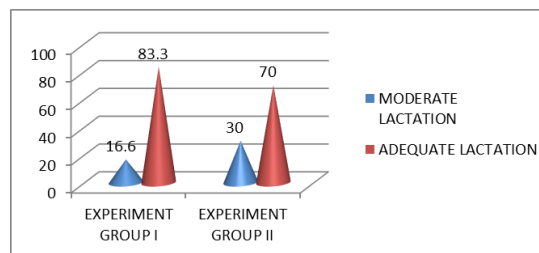
The data was analyzed in terms of the objectives of the study using descriptive and inferential statistics. Demographic variables of the postnatal mothers were analyzed in terms of frequency and percentage distribution. Mean and standard deviation was used to compute pre and post intervention level of lactation among postnatal mothers. Paired “t” test was used to evaluate the effectiveness of selected nursing intervention among postnatal mothers. Chi square test was used to associate the pre test and post test intervention level of reflex zone therapy on lactation among post natal mothers. Chi square test was used to test the association between categorical variables. P < 0.05 was taken as statistically significant.

4. Results

The findings proved that reflex zone stimulation was very effective to improve the level of lactation among primimothers. Out of 60 samples in post test scores, in pre test scores 16.6% was moderate lactation, 83.3% was adequate lactation. In Experimental group 2 shows that 30% was moderate lactation,70% was adequate lactation.83.3% was highest in adequate lactation in experimental group I, in post test scores Experimental group 1 shows that 16.6% was moderate lactation, 83.3% was adequate lactation. In Experimental group 2 shows that 30% was moderate lactation,70% was adequate lactation.83.3% was highest in adequate lactation in experimental group I, in thiruvallur government hospital. This study reveals that out 60 postnatal mothers. In experimental group 1 there was 3.76 mean and 1.56 was SD, standard error was 0.286, t value is 13.14 was significant and effective. In experimental group 2 there was 4.36 in mean, 2.07 in SD, 0.37 in standard error and t value is 11.50 is significant and effective. By comparing this 13.14 was effective in experimental group I, and p-value is p<0.05. The study findings reveals that there is significant variable between the demographic variables such as Age, Religion, education, occupation, parity, day of postnatal period, history of abortion, nature of marriage, duration of marriage, place of living and type of family.

Table 2
 Assessing the effectiveness of lactation on reflex zone therapy among primiparous

Group	Pre Test Mean	Post Test Mean	SD	“T”	Table Value
Experimental group I	3.6	7.36	1.61 1.18	12.24 34.23[S]	2.05
Experimental group II	3.43	7.8	1.86 1.06	10.04 40.206[S]	2.05



5. Discussion

The findings of the present study proved that reflex zone stimulation was very effective to improve the level of lactation among primimothers. Out of 60 samples in post test scores, the pre test mean 3.6 and post test mean 7.36 and SD is 1.61 in experimental group I. In experimental group II mean score is 3.43 and post test score is 7.8, SD is 1.86. In experimental group I was effective. 16.6% was moderate lactation, 83.3% was adequate lactation. In Experimental group 2 shows that 30% was moderate lactation,70% was adequate lactation.83.3% was highest in adequate lactation, in post test scores Experimental group 1 shows that 16.6% was moderate lactation, 83.3% was adequate lactation. In Experimental group 2 shows that 30% was moderate lactation,70% was adequate lactation.83.3% was highest in adequate lactation in experimental group I, in thiruvallur government hospital.

Another similar study by Mohammad bager et al, (Jan -2018) conducted a study on effect of foot reflexology massage on breast milk volume of mothers with premature infants method was two groups foot massage once daily for 7 days , and unrelated areas in the control group. Result were 37 months received massage in a day. It shows positive effect of foot reflexology on increasing breast milk of premature infants mothers.

Another similar study by Fauzi rosozeita, Mohamed cheribiaah (et. al) [2018] conducted a study on effectiveness of breastfeeding intervention on breastfeeding exclusively and duration among primiparous mothers is to determine the effectiveness of breastfeeding intervention in improving breastfeeding, a quasi-experimental design used a purposive sample of 96 primigravidas intervention group =48 control group=48. Data was using breastfeeding assessment questionnaire. The result indicated fourth month postpartum ($\chi^2= 5.671$) ($p=0.017$) in practicing full breastfeeding follow up weeks $\chi^2 =5,414$.

Another similar study by Niven, Isis gohar et. al, (2018) conducted a study to assess the effect of foot reflexology on

post-cesarean pain, by using non probability sampling technique sample of 70 post cesarean section were used. The tools structured interview, findings were after lowered pain after intervention of foot reflexology significantly decreased among women after application.

Another similar study by Gercek, et. al., (2017) conducted a study relationship between breastfeeding self-efficacy and LATCH scores and affecting factors. the design was cross-sectional descriptive study, the method of 303 postpartum women from breastfeeding self-efficacy scale short form and LATCH breastfeeding assessment tool. The result were average LATCH scores and average breastfeeding self-efficacy scale short form scores of women.

6. Conclusion

Reflex zone therapy (foot massage) over breast are found to be an effective nursing intervention in promoting breast milk secretion. The findings of the study enlighten the fact that reflex zone therapy can be used as an effective nursing intervention in promoting the breast milk secretion.

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