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EVALUATE THE EFFICACY OF OKETANI BREAST MASSAGE THERAPY ON SUCCESSFUL BREAST FEEDING AMONG LSCS MOTHERS IN SELECTED HOSPITALS

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ABSTRACT –

Background of the study- The negative effect of the cesarian section on breast feeding are a major global concern. Breastfeeding is essential for infant health, yet mothers who undergo lower segment caesarean section (LSCS) often face difficulties initiating and maintaining successful breastfeeding. Oketani Breast Massage Therapy (OBMT) is a specialized technique that may improve lactation outcomes. **OBJECTIVES:**1. To evaluate the effect of oketani breast massage therapy for successful breastfeeding among LSCS mothers **METHODOLOGY:** The Quasi experimental study was used 100 lscs mothers by convenience sampling technique. IBFAT Score obtained information about breastfeeding of participants. This approach helps maintain the integrity and validity of the study results. Data analysed using both descriptive and inferential statistics to describe and correlation between breastfeeding & to show the association between breastfeeding & demographic data. **RESULTS:** The post-test IBAT scores in the experimental group showed a significant improvement compared to the pre-test scores ($p<0.05$). **CONCLUSION:** Oketani Breast Massage Therapy is an effective nursing intervention for enhancing breastfeeding success among LSCS mothers. Implementing OBMT in postpartum care could support lactation and improve neonatal health outcomes.

KEYWORDS: Oketani Breast Massage Therapy, Lower segment cesarean section, Review of literature, successful breastfeeding, United Nations International Children's Emergency Fund

INTRODUCTION

Despite global efforts to promote natural childbirth, the rate of non-emergency caesarean sections is increasing, especially in developing countries.[1]
However, the rate of caesarean sections in other areas of the world ranges from 10% to 15%. Oketani breast massage is an effective, cost-effective, and easy method. that was first introduced as a massage technique in 1981 in Japan by Satomi Oketani.[1]One of the standard nursing interventions mentioned in the Nursing Interventions (NIC) is massage remedy. breast massage is a treatment technique used throughout the world and aims to relieve breastfeeding problems. There is a variety of breast massage techniques that may be used to treat breastfeeding problems. Some of these techniques include the Oketani breast massage, Gua Sha therapy, and general massage of breast tissue.[2]

The researcher believed that this study will form a useful effect in LSCS mothers who having problem regarding breastfeeding. Lack of breastfeeding increases the risk of the baby developing chronic conditions, which are associated with increased costs for the family and the hospital

PROBLEM STATEMENT

Evaluate the efficacy of oketani breast massage therapy on successful breast feeding among lscs mothers in selected hospital

OBJECTIVES:

- To evaluate the breastfeeding among LSCS mothers before intervention.
- To evaluate the effect of oketani breast massage therapy for successful breastfeeding among LSCS mothers.
- To compare the successful breast feeding in control and interventional group among LSCS mothers.
- To associate study findings with selected demographic variables.

HYPOTHESES:

H_0 - There is no significant difference in successful breastfeeding after intervention among LSCS mothers.

H_1 - There is significant difference in successful breastfeeding after intervention among LSCS mothers.

ASSUMPTIONS

LSCS mothers may have some knowledge regarding oketani breast massage therapy.

Review of literature;

A study conducted by Academy of breastfeeding medicine protocol committee, 2000, 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

Massage Techniques: There were many therapy to increase milk volumes, including oxytocin massage (n= 11, 50%),17,18,26-30,35-37,39 back massage (n=3, 13.64%),31- 33 neck massage (n=1, 4.55%),25 full-body massage (n=2, 9.09%),19,20 Oketani breast massage (n=1, 4.55%),16 Woolwich massage (n=1,4.55%)38 and traditional Chinese massage (n=3, 13.64%).21,22,34 Similarly, two groups of massage treatments consisted of partial body massage (oxytocin massage, back massage, neck massage and full-body massage) and breast massage (Oketani massage and tradition).[3]

Maryam shahri conducted study in 2021 on The Effect of Oketani Breast Massage on Successful Breastfeeding, Mothers' Need for Breastfeeding Support, and Breastfeeding Self-Efficacy: An Experimental Study Purpose-this study aimed to determine the effect of oketani breast massage on breastfeeding success. Investigator Conclude that oketani massage can be used as a care intervention by nurses to improve breastfeeding mothers who undergo caesarean section.[1]

En Espanol conducted study in Jan 2012 on the most commonly reported breastfeeding difficulties are moderate to severe. Maternal fatigue [68.4/], leaking [44.0/] and engorged [35.9/], sore nipples [43.1], latch problem [30.7].[4]

Raheb Sabry A quasi-experimental investigation on the impact of breast massage on reducing breast engorgement in postpartum women was carried out in 2022 by Fawzy Mohamed et al. Results: Nearly two thirds of the tested sample had severe pain (62.0%), whereas the entire sample experienced swelling and warmth (100.0%) and mild engorgement (32.0%). The majority of the sample under study (80.0%) had normal breasts after 5 days of intervention, 76.0% reported no pain, 100.0% had alkaline milk PH, and 100.0% had a positive breast-feeding score. Researchers came to the conclusion that breast massage was a useful treatment for breast engorgement.[5]

Ayesha Hendriana Ngestiningrum1(CA conducted experimental study in 2022 result of this study shown that the combination of the Oketani massage and the back massage may prevent the occurrence of breast engorgement. Investigator conclude that the combination of the Oketani massage and the back massage is hoped to become an alternative massage in improving breastmilk production and in preventing breast engorgement.[6]

MATERIAL AND METHOD

Research design: In this study the Quasi experimental research design was used in this study.

Study setting: selected hospital

Sample: LSCS Mother,50 in each group.

Sampling techniques: Non probability convenience sampling was used to select the participants for this study.

Sample size calculation: (Comparing two proportion Paired before after)

$$\phi = \frac{\pi_A(1-\pi_B)}{\pi_B(1-\pi_A)}$$

$$\pi_{Discordant} = \pi_A(1-\pi_B) + \pi_B(1-\pi_A)$$

$$N_{pair} \geq \frac{(Z_{1-\alpha/2}(1-\phi) + Z_{1-\beta}\sqrt{(\phi+1)^2 + (\phi-1)^2\pi_{Discordant}})^2}{(\phi-1)^2\pi_{Discordant}}$$

DATA COLLECTION TOOL:

Section A: Demographic data of LSCS mothers.

Section B: Modified IBFAT Tool

DECRIPTIONS OF TOOL:

INFANT BREASTFEEDING ASSESSMENT TOOL (IBFAT)

Infant Breastfeeding Assessment Tool (IBFAT) Reprinted from: Matthews, M.K. (1988). Developing an instrument to assess infant breastfeeding behaviour in the early neonatal period. Midwifery, 4(4), 154-165, with permission of Elsevier. Infant Breastfeeding Assessment Tool (IBFAT) Check the score which best describes the baby's feeding behaviours at this feed. 3 2 1 0 In order to get baby to feed: Rooting How long from placing baby on breast to latch & suck? Sucking pattern MOTHER'S EVALUATION How do you feel about the way the baby fed at this feeding? 3 – Very pleased 2 – Pleased 1 – Fairly pleased 0 – Not pleased IBFAT assigns a score, 0,1,2, or 3 to five factors. Scores range from 0 to 12. The mother's evaluation score is not calculated in the IBFAT score. 87 Nursing Best Practice Guideline Placed the baby on the breast as no effort was needed. Rooted effectively at once. 0 – 3 minutes. Sucked well throughout on one or both breasts. Used mild stimulation such as unbundling, patting or burping. Needed coaxing, prompting or encouragement. 3 – 10 minutes. Sucked on & off but needed encouragement. Unbundled baby, sat baby back and forward, rubbed baby's body or limbs vigorously at beginning and during feeding. Rooted poorly even with coaxing. Over 10 minutes. Sucked poorly, weak sucking; sucking efforts for short periods. Could not be aroused. Did not root. Did not feed. Did not suck.

DESCRIPTION OF THE INTERVENTIONS

standardized tool for infant breastfeeding assessment tool.

Description of Interventions

The mothers will select using convenience sampling and randomly assigned to the intervention and control groups.

Oketani breast massage was performed using eight different manual techniques. Steps 1 to 7 are called "course of treatment" and Step 8, "expressing or milking".

A set of operations and expressing are completed within one minute and this is repeated for 15 to 20 minutes.

Pushing and pulling away Steps 1, 2, and 3 involve manipulations to separate the hard portion of the breast from the fascia of the pectoral's major with very gentle pressure and without causing discomfort to mothers

Steps 4 to 6 involved pulling the whole breast with two thumbs down and to both sides by both hands.

the whole breast is pushed down towards the umbilicus.

steps 5 and 6 are techniques to isolate the hard base portions of the breast.

7 involves rotating the breast gently clockwise with stretching of its base

8.evaluation of successful breastfeeding.

VAIDITY OF TOOL:

S-CVI (Scale Content Validity Index): 0.91

I-CVI (PCA – Proportion of Content Validity Agreement); The tool's content validity was established by 11 experts ; I-CVI index is 0.91

Reliabilty of Tool

By using parallel form method of reliability, it is found to be 0.9858 for intervention group and 0.9759 for control group for IBAT score and hence tool is reliable and valid**.**

Inclusion criteria:

1.lscs mothers with term baby.

Exclusion criteria:

1. mothers who having any complications during caesarean sections.

CONSENT AND ETHICAL CONSIDERATION:

ethical committee approval was sought. Prior permission was obtained from the concerned authority. IEC NO.2085/23-2-24.

Informed written consent was obtained from study subjects. Confidentiality and anonymity of subjects maintained. Participants protected from all type of harms. Freedom to withdraw from the study at any point of time was assured.

VARIABLES OF THE STUDY:

Independent variable- In this study, oketani breast massage therapy is the independent variable.

Dependent variable- In this study successful breastfeeding are the dependent variable.

Demographic variables:

1. Age Of Mothers
2. Type Of Family.
3. Education Of Mother.
4. Occupation Of Mother.
5. Area Of Residence
6. Income
7. Gravida

STUDY PROCEDURE AND DATA COLLECTION:

The study was conducted only after the approval of the IEC. Permission to conduct study taken from concerned authority. LSCS mothers who fulfil the inclusion criteria was assigned to study. Written informed consent was taken from the participants in the research study. Each participant received a code number and IBAT Score. A IBAT Score obtained information on socio-demographic of participants. There after baseline breastfeeding assessed. This approach helps maintain the integrity and validity of the study results. Thereafter, Investigator delivered oketani breast massage therapy for successful breastfeeding for the participants up to three days. After completion of massage therapy post-test for breastfeeding assessment and evaluation was conducted.

Content and construct validity of the research tools was by the experts in the field child health Nursing department, department of obstetrics and gynaecology.

Statistical analysis:

1. Descriptive statistics: -The descriptive statistical analysis included Arithmetic Mean
2. Standard Deviation (SD) Mean percentage Max/Min for experimental group and Control Group.
3. The demographic variables of the subjects were analysed using frequency and percentage.

Inferential statistics: -

1. Paired “t” test to compare pre-test and post-test breastfeeding scores.
2. ANNOVA test was use to find out the association of pre- test breastfeeding score with the demographic variables.
3. The calculated data were presented in the form of graphs and table

RESULTS:

Demographic data: Table 1 shows that control and experimental group participants bear similar demographic characteristics.

Table 1: Percentage wise distribution of LSCS Mothers according to their demographic characteristics.

Demographic Variables	Intervention Group(n=50)	Control Group(n=50)
Age(yrs)		
18-20 yrs	27(54%)	**17(34%)**
21-25 yrs	21(42%)	**22(44%)**
26-30 yrs	2(4%)	**8(16%)**
31 yrs	0(0%)	**3(6%)**
Educational Status		
Illiterate	2(4%)	**8(16%)**
Primary	39(78%)	**28(56%)**
Secondary	9(18%)	**10(20%)**
Graduate and above	0(0%)	**4(8%)**
Income of the family		
10000 Rs	28(56%)	**19(38%)**
11000-20000 Rs	19(38%)	**24(48%)**
21000-30000 Rs	3(6%)	**7(14%)**
31000 Rs	0(0%)	**0(0%)**
Type of family		
Single Parent	32(64%)	**26(52%)**
Nuclear	18(36%)	**20(40%)**
Joint	0(0%)	**4(8%)**
Extended	0(0%)	**0(0%)**
Occupation		
Housewife	40(80%)	**29(58%)**
Private Job	9(18%)	**15(30%)**
Govt Job	1(2%)	**2(4%)**
Others	0(0%)	**4(8%)**
Residence		
Slum	7(14%)	**17(34%)**
Urban Area	39(78%)	**24(48%)**
Rural Area	4(8%)	**9(18%)**
Gravida		
Primigravida	40(80%)	**41(82%)**
Multigravida	**10(20%)**	**9(18%)**

Section B

Table 2: Significance of difference between IBAT Score in Pre and post test of LSCS Mothers-Intervention Group

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	5.76	1.39	2.24±1.63	9.68	0.0001 S,p<0.05
Post Test	8	1.08			

Table 2 shows the comparison of pretest and post-test IBAT score of LSCS Mothers from selected hospital of the city. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for n=50-1 i.e. 49 degrees of freedom was 2.00. The calculated 't' value i.e. 9.68 are much higher than the tabulated value at 5% level of significance for overall IBAT score of LSCS Mothers which is statistically acceptable level of significance. Hence it is statistically interpreted that Oketani Breast Massage Therapy on successful breast feeding among LSCS mothers fro m selected hospitals was effective. Thus, the H_1 is accepted.

Table 3; Significance of difference between IBAT Score in Pre and post test of LSCS Mothers-Control Group

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	4.60	1.16	1.68±1.05	11.22	0.0001
Post Test	6.28	1.22			S,p<0.05

This table shows the comparison of pretest and post -test IBAT score of LSCS Mothers from selected hospital. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for n=50-1 i.e. 49 degrees of freedom was 2.00. The calculated 't' value i.e. 11.22 are much higher than the tabulated value at 5% level of significance for overall IBAT score of LSCS Mothers which is statistically acceptable level of significance. Hence it is statistically interpreted that Oketani Breast Massage Therapy on successful breast feeding among LSCS mothers from selected hospitals of the city was effective. Thus, the H_1 is accepted.

Table 4: Comparison of mean difference in IBAT score of intervention group and control group among LSCS mothers

Group	Mean	SD	t-value	p-value
Intervention Group	2.24	1.63	5.22	0.0001
Control Group	0.86	0.90		S,p<0.05

Table 4 shows the comparison of mean difference in IBAT score of LSCS Mothers from selected hospital. Mean and standard deviation values are compared and student's unpaired 't' test is applied at 5% level of significance. The tabulated value for n=50+50-2 i.e. 98 degrees of freedom was 1.98. The calculated 't' value i.e. 5.22 are higher than the tabulated value at 5% level of significance for mean difference in IBAT score of LSCS Mothers in intervention and control group which is statistically acceptable level of significance. Hence it is statistically interpreted that Oketani Breast Massage Therapy on successful breast feeding among LSCS mothers from selected hospitals of the city was effective. Thus, the H_1 is accepted.

The post-test IBAT scores in the experimental group showed a significant improvement compared to the pre-test scores ($p<0.05$).

DISCUSSION

The primary purpose of the study was to assess the efficacy of oketani breast massage therapy for successful breastfeeding among LSCS mothers. According to this study my results are positive and with the oketani breast massage therapy improved breastfeeding.

Pretest score:
Mean IBAT score in intervention group was 5.76±1.39 and in control group it was 4.60±1.16 and mean percentage of IBAT score in intervention group was 48±11.61 and in control group it was 38.33±9.67.

Posttest IBAT score
Mean IBAT score in intervention group was 8±1.08 and in control group it was 6.28±1.22 and mean percentage of IBAT score in intervention group was 66.66±9.06 and in control group it was 52.33±10.24.

CONCLUSION:
During this study it was observed that LSCS mothers were very conscious and interested to improve breastfeeding and reduce breastfeeding problems by using oketani breast massage therapy. The study will help to improve the breastfeeding and to new learning technique about successful breastfeeding.

Financial support and sponsorship
Nil

Limitations

- The availability of time is limited for data
- The study was confined to a small number 100 LSCS mother which limit the generalization that can be made.

Recommendations

A similar study can be conducted on large scale. A similar study may be replicated with the other breastfeeding mothers. A similar study can be replicated by using other innovative sources. A comparative study can be done to evaluate the effectiveness of oketani breast massage therapy verses general therapy for successful breastfeeding.
A similar study can be replicated by using other Sampling Technique.

Conflict of interest:
There is no conflict of interest in this study. No any risk factors to the subjects of the study.

References

1. Mahdizadeh-Shahri, M., Nourian, M., Varzeshnejad, M., & Nasiri, M. (2021). The effect of Oketani breast massage on successful breastfeeding, mothers' need for breastfeeding support, and breastfeeding self-efficacy: An experimental study. *International Journal of Therapeutic Massage & Bodywork, 14*(3), 4–14. https://doi.org/10.3822/ijtmb.v14i3.633
2. Cho, J. S., Ahn, H. Y., Ahn, S., Lee, M. S., & Hur, M. H. (2012). Effects of Oketani breast massage on breast pain, the breast milk pH of mothers, and the sucking speed of neonates. *Korean Journal of Women Health Nursing, 18*(2), 149–158. https://doi.org/10.4069/kjwhn.2012.18.2.149
3. Academy of Breastfeeding Medicine Protocol Committee. (2000). ABM clinical protocol #15: Breastfeeding promotion in the hospital. *Breastfeeding Medicine, 15*(1), 17–22.
4. En Español. (2012). The most commonly reported breastfeeding difficulties are moderate to severe. https://www.ascalema.es/wpcontent/uploads/2017/12/lactancia-materna-2-6-16.pdf
5. Fawzy Mohamed, R. S., Ali, A. A., Ahmed, A. E., & Abdelaziz, F. E. (2022). Effect of breast massage on reduction of breast engorgement among postpartum women: A quasi-experimental study. Zenodo. https://zenodo.org/records/6783188
6. Ngestiningrum, A. H., Nuryani, & Setiyani. (2022). Effectivity of the Oketani massage and the back massage combination towards breastmilk production and to prevent breast engorgement of post-partum mothers. *Heanoti Journal*. https://heanoti.com/index.php/hn/article/view/hn60104