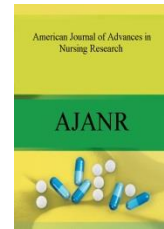




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EFFECTIVENESS OF ALMOND OIL MASSAGE ON BREAST MILK SECRETION AMONG POSTNATAL MOTHERS UNDERGONE LSCS IN SELECTED HOSPITAL

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ABSTRACT

The postnatal period begins after the birth of the baby and marks the end of pregnancy. Breastfeeding has been shown to be beneficial for both the mother and the baby's health and well-being. Massaging with almond oil can help to stimulate the secretion of breast milk early postnatal period. A study was conducted to determine the effectiveness of almond oil massage on breast milk secretion among postnatal mothers undergone LSCS in selected hospital. A Quasi experimental non-randomized control group design was used with the purposive sampling technique to select the samples of 60 postnatal mothers who satisfied the inclusive criteria for the study. Pretest level of breast milk secretion was assessed by using self structured breast milk adequacy checklist. Almond oil breast massage was given by the researcher for a period of 4 times a day for 4 days. The posttest was done using the same tool at the end of intervention. The data were analyzed using descriptive and inferential statistics. The paired 't' value for breast milk secretion is 15.22***, which is significant at $p \leq 0.05$ and highly significant at $p \leq 0.01$, $p \leq 0.001$. The findings showed that almond oil massages was effective on the level of breast milk secretion among postnatal mothers.

INTRODUCTION

Breastfeeding has been shown to be beneficial for both the mother and the baby's health and well-being. Breast feeding at a young age can lower newborn mortality by 22%. Early breastfeeding has the potential to save up to 1.45 million lives annually, particularly in underdeveloped nations. This significant impact is primarily attributed to its ability to reduce infant mortality caused by lower respiratory tract infections and diarrhea [1].

Overall about 55% of the children (0-5months) were exclusively breastfed in India. The highest prevalence was observed in the Northeastern regions of

India (61.7%) and the lowest in the Central region (50.5%) [2].

Among the south Indian states, Andhra Pradesh reported the highest prevalence of exclusive breastfeeding (71.1%), followed by Karnataka (54.2%), Kerala (53.3%), and Tamil Nadu (48.3%) [2].

Almond oil has been found to promote the production of milk. It contains a high concentration of oleic and linolenic essential fatty acids. Several studies have investigated the effects of almond oil on breast milk production and have found that massaging with almond oil can help stimulate the secretion of breast milk. These studies suggest that massaging with almond oil three times a day yields positive results in promoting breast milk production. [3, 4]

Conducted an experimental study to assess the

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Research Article



impact of massage using almond oil on breastfeeding sufficiency. Purposive sampling was employed to recruit a sample of 100 postpartum mothers. Among them 50 assigned to the experimental group and the remaining 50 to the control group. In addition to monitoring the attachment of the babies to the breast, their sucking and swallowing patterns, urine production within a 24-hour period, number of stools passed within a 24-hour period, and the duration of sleep following each feed, a questionnaire was administered to evaluate the quality of the breast milk. The experimental group experienced a 90% increase in breastfeeding adequacy after receiving an almond oil massage, whereas the control groups increase in breastfeeding adequacy was only 80%. The study concluded that almond oil is a safe and effective alternative treatment for enhancing breast milk secretion. The satisfaction level of the participants in the sample was significantly higher. [5]

Many postnatal mothers suffer with low breast milk secretion during early post natal period. Hence the investigator was motivated to do the study to assess the effectiveness of almond oil massage on breast milk secretion among postnatal mothers undergone LSCS in selected hospital.

Statement of the Problem:

A study to assess the effectiveness of almond oil massage on breast milk secretion among postnatal mother's undergone LSCS in selected hospital

OBJECTIVES

- To assess and compare the pre-test and post-test scores of breast milk secretion among postnatal mothers in the experimental group and control group.
- To determine the effect of almond oil massage on breast milk secretion among postnatal mothers.
- To find an association between the pre-test score of breast milk secretion and selected demographic variables such as age, education, type of family, food habits, and obstetric variables such as order of pregnancy, type of nipple, type of anesthesia and postnatal day.

The first objective of the study was to assess and compare the pre-test and post-test scores of breast milk secretion among postnatal mothers in the experimental group and control group.

Table 1: Frequency and Percentage distribution of pretest and posttest score on breast milk secretion among postnatal mothers in experimental group and control group. N=60

| S.NO | Level of Breast Milk | Experimental group (n=30) | | Control group (n=30) | |
|------|----------------------|---------------------------|----------|----------------------|----------|
| | | Pretest | Posttest | Pretest | Posttest |
| | | | | | |

HYPOTHESES

H1:There is a significant difference between the pre-test and post-test scores of breast milk secretion after almond oil massage.

H2:There is a significant association between the pre-test score of breast milk secretion and selected demographic variables such as age, education, type of family, and food habits, as well as obstetric variables such as order of pregnancy, type of nipple, type of anesthesia and postnatal day. [6]

RESEARCH METHODOLOGY

The Research Approach adopted for the study was quantitative research approach. The research design used for this study was Quasi experimental non-randomized control group design. The study was conducted in selected hospitals such as ML hospital in Nagercoil for Experimental group and Lakshmi hospital for control group. Sixty samples who satisfied the inclusive criteria were selected by using purposive sampling technique. Postnatal mothers level of breast milk secretion was assessed by using self structured breast milk adequacy checklist. Informed consent was obtained from the participants and the demographic data was collected from the postnatal mothers. The Pretest were done by using self structured Breast milk adequacy checklist. Then the almond oil Massage was given for the mother four times a day for four days for experimental group. Posttest was done for both groups after intervention using the same tool. [7]

RESULT AND DISCUSSION

Statistical test like frequency and percentage distribution of participants based on demographic characteristics revealed that considering the age, most of the women belongs to 24-30 years (46.6%). Based on education, majority of them were graduated (63.3%). Based on type of family majority of them were nuclear family (63.3%). Based on dietary pattern majority of them were non-vegetarian (86.6%). Based on type of anesthesia majority of them had spinal anesthesia (93.3%). Based on type of nipple majority of them had normal nipple (70%). Based on order of pregnancy majority of them primi mother (73.3%). Based on postnatal day majority of them had third day (60%). [8]



| | Secretion | F | % | F | % | F | % | F | % |
|---|------------|----|-------|----|-------|----|-------|----|-------|
| 1 | Adequate | 0 | 0.00 | 22 | 73.33 | 16 | 53.33 | 3 | 10 |
| 2 | Moderate | 19 | 63.33 | 8 | 26.67 | 14 | 46.67 | 15 | 50.00 |
| 3 | Inadequate | 11 | 36.67 | 0 | 0.00 | 0 | 0.00 | 12 | 40.00 |

Table 1 predicts that in the pre-test, in the experimental group score on breast milk secretion among 30 postnatal mothers, 19 (63.33%) of them had a moderate level of breast milk secretion, 11 (36.67%) of them had an inadequate level of breast milk secretion, and

in the post-test 22 (73.33%) of them had an adequate level of breast milk secretion, 8 (26.67%) of them had a moderate level of breast milk secretion, and none of them had an inadequate level of breast milk secretion. [9]

Second objective of the study was to assess the effect of almond oil massage for adequate breast milk secretion among postnatal mothers in the experimental group.

Table 2: comparison of mean, standard deviation, and unpaired 't' test value on posttest score on breast milk secretion among postnatal mothers in the study group and control group. N=60

| Variable | Group | Test | Mean | S D | Paired 't' test |
|--------------------------------|--------------------|-----------|-------|------|-----------------|
| Level of breast milk secretion | Experimental group | Pre test | 7.7 | 3.24 | 15.22*** |
| | Control group | Post test | 13.37 | 2.75 | |
| | Experimental group | Pre test | 7.3 | 2.79 | 0.39 |
| | Control group | Post test | 7.87 | 3.18 | |

Table 2 shows the comparison of mean, standard deviation, and paired 't' value on pre- and post-test scores on breast milk secretion amid postnatal mothers in the experimental group and control group. [10] The mean score on breast milk secretion amid the postnatal mothers in the study group was 7.7 in the pretest and 13.37 in the

posttest. The paired 't' value for breast milk secretion is 15.22***, which is significant at $p \leq 0.05$ and highly significant at $p \leq 0.01$, $p \leq 0.001$. The findings showed that almond oil massages are effective on the level of breast milk secretion amid the postnatal mothers.

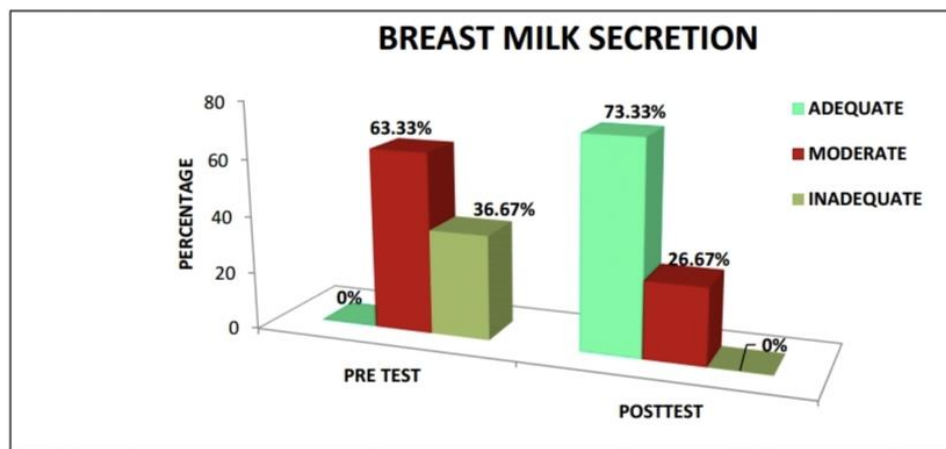


Figure 1: Mean score on pretest and posttest level of breast milk secretion among postnatal mothers in experimental group

The study findings [11] conducted a study to evaluate the impact of massage with almond oil on the production of breast milk. The quasi experimental design was adopted and sample were selected from Medical College and Research Centre in Srilanka. Forty samples

were selected by purposive sampling technique. The level of breast milk secretion was assessed by using a questionnaire. The results showed that out of the sample, 12 participants (30%) were found to have a deficiency in breast milk production, 24 participants (60%) had a



moderate level, and 4 participants (10%) had an adequate level based on the pre-test scores related to breast milk secretion. In the post-test scores, the majority, 33 (82.5%), were adequate, 7 (17.5%) were moderate, and none were inadequate. The results of this study recommend midwives to improve the quality of breast milk in postpartum mothers by performing lactation massage using almond oil. [11]

Third objective of the study was to find out the association between pre-test level of breast milk secretion and selected demographic variables such as age, education, food habits, type of family. Obstetric variables such as order of pregnancy, type of nipple, type of anesthesia, postnatal day.

The chi square test was used to associate the pretest level of breast milk secretion among the selected demographic variables such as age, education, dietary pattern, type of family. Obstetric variables such as order of pregnancy, type of nipple, type of anaesthesia, postnatal day are less than the table value, which indicates that there is no significant association at $p \leq 0.05$, $p \leq 0.01$, $p \leq 0.001$ with their pretest score on breast milk secretion among postnatal mothers.

REFERENCES

1. Adele Pilleteri, (2010). Maternal and Child Health Nursing. 2nd edition. New York: Lippincott publications. 1012-1015.
2. Basavavthappa, B.T. (2006). Text book of Midwifery and Reproductive health Nursing. 1st edition. New Delhi: Jaypee Brothers publications. 731-734.
3. Basavanthappa B.T. (2002). *Nursing Research*. 3rd edition. New Delhi: Jaypee Brothers publications. 72-78.
4. Berkeley, C. (2009). A Handbook Of Midwifery For Nurses And Midwifery. 2nd editiIndore: N.R.Brothers publications. 328.
5. Dutta D.C. (2006). Text book of Obstetrics . 6th edition. kolkatta: Jaypee publications . p no: 316-328.
6. Betty R.S. (2008). Textbook for Midwives. 3rd edition. Britain: *Markays of Chatham publications*, 439-452.
7. Bunadette, P.H. (2011). Nursing research principles and methods. 2nd edition. *Philadelphia Lippincott publications*. 453-456 .
8. ArunGupta. (2019). Breast feeding first hour. *Nightingale Nursing Time*. 3. 9-11.
9. Chudasama , P.,&Kavishwar. (2017). Breast feeding Initiation Practice and Factors affecting breastfeeding. *Journal of family practice*. 7, 21-30.
10. Clements J, Elyazeed R.A & Rao M. (2012). Early Initiation of breastfeeding and the risk of infant diarrhoea in rural Egypt. *Paediatrics Journal* . 78, 621-627.
11. Dewey K.G. (2011). Maternal and Fetal Stress Are Associated With Impaired Lactogenesis in Humans. *Journal of nutrition*. 33, 37-45.
12. Dharitri Swain, (2010). Knowledge and Practice of Colostrum Feeding Among Postnatal Mothers. *Nightingale Nursing Times*. 5, 52-

Nursing Implications

1. The result of the study encourages the nurse administrator to conduct an in service education program on various methods of non-pharmacological treatment to promote breast milk secretion.
2. This helps the nurse administrator provide effective non-pharmacological measures for promoting breast milk secretion. [12]

Recommendations

1. The study may be replicated with randomization in the selection of a large sample.
2. Nurse researchers can do studies related to other types of alternative therapies for promoting breast milk secretion.
3. A study can be carried out with a number of variables and in different geographical locations.

CONCLUSION

The almond oil breast massage technique was found effective method to improve the level of Breast milk secretion among postnatal mothers undergone LSCS. The findings of this study provided evidence that the use of almond oil was effective in improving the breast milk secretion among postnatal mothers undergone LSCS.

