*International Journal of Science and Healthcare Research*
*DOI: https://doi.org/10.52403/ijshr.20210766*
*Vol.6; Issue: 3; July-Sept. 2021*
*Website: ijshr.com*
*Original Research Article* *ISSN: 2455-7587*

# Effectiveness of Planned Teaching Programme on The Levels of Knowledge Regarding Breast Feeding Problems among Primigravid Mothers at Urban Health Center, KASPA, Vellore

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## ABSTRACT

Pregnancy is a journey of creating a new life. Motherhood makes this journey memorable and happy. During pregnancy, the mother and baby are considered a single unit because the baby gets the essential nutrition from the mother through the placenta. At birth, this bond is replaced by breastfeeding. A mother who is breastfeeding for the first time is in a vulnerable position and requires support, encouragement and knowledgeable assistance. There are many possible breast abnormalities that breastfeeding mothers may encounter. Identifying these issues are very important to continue a healthful breastfeeding relationship with the child. The research approach selected for the study is quantitative research approach quasi experimental design with one group pre and post test design. Through the Non probability purposive sampling technique was used to select 60 primigravid mothers from Urban Health Centre. Demographic variables were collected by using a structured questionnaire. Planned teaching programme was given to the primigravid mothers by using charts, models, and pamphlets. Post test was conducted after giving planned teaching programme. The collected data were analysed based on the objectives using Descriptive and inferential statistics were used for analysis and interpretation of data. The study results revealed that the pretest knowledge mean score was 18 ± 2. After the planned teaching programme, the posttest knowledge mean score was 24 ± 2. The calculated paired 't' test value19 was greater than the table value 1.96 which is highly significant at $p < 0.05$ level. Hence the research hypothesis $H_1$was accepted. The study was a significant increase in the levels of knowledge, after planned teaching programme among primigravid mothers regarding breast feeding problems. This shows that the planned teaching programme was effective.

***Key words:*** Breastfeeding problems, Primigravid mothers.

## INTRODUCTION

Pregnancy is a journey of creating a new life. Motherhood makes this journey memorable and happy. During pregnancy, the mother and baby are considered a single unit because the baby gets the essential nutrition from the mother through the placenta. At birth, this bond is replaced by breastfeeding. Breastfeeding is considered as one of the most natural and intimate of all human interactions. As a mother, one of the best things a woman can do for her infant is breast feeding.

PLOS ONE journal (2020) reports that the prevalence of ineffective breast feeding technique ranges from 30-70 percent in Denmark, Brazil, Nepal, India, Libya, and Ethiopia and some of the factors that contribute to ineffective breastfeeding techniques are breast problems, low level of maternal education, lack of breastfeeding experience, home delivery, insufficient

counseling operative deliveries, and primiparity.

A mother who is breastfeeding for the first time is in a vulnerable position and requires support, encouragement and knowledgeable assistance. There are many possible breast abnormalities that breastfeeding mothers may encounter. Identifying these issues are very important to continue a healthful breastfeeding relationship with the child. In addition to motivating mothers to breastfeed, obstetricians and nurses must ensure that pregnant women are physically prepared to nurse their infants. An often-neglected area is the detection and correction of anatomical abnormalities of the nipples. Examination of the nipple and areola is important to identify any anatomical abnormalities. The abnormalities of the nipple include the long nipple, short nipple, abnormally large nipple, flat nipple, inverted nipple and cracked nipple. Such abnormalities may cause difficulties in feeding.

Breast engorgement is an accumulation of milk in the breast leads to edema and swelling. It occurs in the mammary glands due to expansion and pressure exerted by the synthesis and storage of breast milk. The incidence rate of breast engorgement throughout the world is 1:8000, and in India, it is 1:6500. Signs and symptoms occur most commonly between days three and five, with more than two thirds of women with tenderness on day five but some as late as days 9-10. Majority experience moderate symptoms. More time spent in breast feeding during 48 hours after birth correlates with less engorgement. The 20 percent post- natal mothers especially primigravida mothers are affected with breast engorgement from 0-4 days of postnatal period. Breast engorgement can occur due to common reasons such as a suddenly increased milk production, delayed initiation of breastfeeding, infrequent feeds, ineffective suckling, and sudden change in breast feeding routine and suddenly stopping breastfeeding.

Mastitis is an inflammation of the mammary gland. Mastitis is an acute, debilitating condition that occurs in approximately 20 percent of breastfeeding women who experience a red, painful breast with fever. Two mode of infection, firstly involving the parenchymatous breasts tissues which may lead to cellulitis. The lacteal system remains unaffected. Secondly, infection gains access through the lactiferous duct leading to development of primary mammary adenitis. Almost always from nursing infant's nose and throat, the organism enters the breast through the nipple at the site of a fissure or abrasion. In superficial cellulitis, the onset is acute during first 2-4 weeks postpartum. There may be inflammation preceded by engorgement, fever (102°F or more) with chills, tachycardia, flu like symptoms like generalized malaise, headache, nausea, vomiting, sudden onset of intense breast pain. Breast abscess usually occurs as a complication of mastitis.

**Statement of the Problem**

Effectiveness of planned teaching programme on the levels of knowledge regarding breastfeeding problems among primigravid mothers at Urban Health Centre, Kaspa, Vellore.

**Objectives**

1. To assess the pretest levels of knowledge regarding breast feeding problems among primi gravid mothers
2. To evaluate the effectiveness of planned teaching programme regarding breast feeding problems among primigravid mothers.
3. To determine the association between post-test levels of knowledge regarding breast feeding problems among primigravid mothers and selected demographic variables.

**Hypotheses**

**H1**- There is a significant difference between pre and posttest levels of knowledge regarding breastfeeding problems among primigravid mothers.

**H2-** There is a significant association between posttest levels of knowledge regarding breastfeeding problems among primigravid mothers and selected demographic variables.

## METHODOLOGY

The purpose of the study was to assess Effectiveness of planned teaching programme on the levels of knowledge regarding breastfeeding problems among primigravid mothers. A quantitative research approach and quasi experimental design was used conduct this study at Vellore. Non probability purposive sampling technique was used to select 60 primigravid mothers from Urban Health Centre, Kaspa, Vellore.

Structured questionnaire was used to assess the levels of knowledge. Descriptive and inferential statistics were used for analysis and interpretation of data. Effectiveness of planned teaching programme on the levels of knowledge regarding breastfeeding problems among primigravid mothers was assessed by using Paired 't' test Association between pretest knowledge level with the selected demographic variables was analyzed using Chi-square test.

## RESULT AND DISCUSSION

The objective was to assess pre and posttest levels of knowledge regarding breastfeeding problems among primigravid mothers.

### Section II: Data on Pre and Posttest Levels of Knowledge Regarding Breastfeeding Problems among Primigravid Mother

**Table 4.13: Frequency and percentage distribution of pre and posttest levels of Knowledge regarding breast feeding problems among primigravid mothers n=60**

| S.No | Levels of Knowledge | PRETEST | | POSTTEST | |
|---|---|---|---|---|---|
| | | Frequency | % | Frequency | % |
| 1. | Inadequate knowledge (0 – 50%) | 10 | 16.7 | - | - |
| 2. | Moderately Adequate Knowledge (51 – 75%) | 49 | 81.7 | 10 | 16.7 |
| 3. | Adequate knowledge (76% and above) | 1 | 1.7 | 50 | 83.3 |

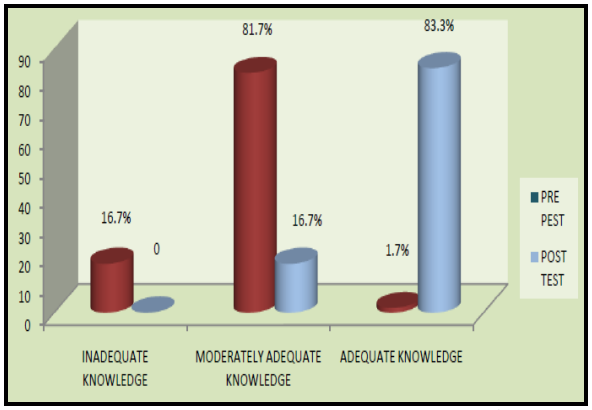


**Figure: 4.13 Frequency and percentage distribution of pre and post test levels of knowledge regarding breastfeeding problems among primigravid mother**

In this the result indicates that shows the pre and posttest levels of knowledge regarding breast feeding problems among 60 primigravid mothers. In pretest, majority 49 (81.7%) had moderately adequate knowledge, 10 (16.7%) had inadequate knowledge and1 (1.6%) had adequate knowledge. The post test results reveals that majority 50 (83.3%) had adequate knowledge, 10 (16.7%) had moderately adequate knowledge and no one had inadequate knowledge.

A structured questionnaire was used to assess the levels of knowledge regarding breastfeeding problems among 60 primigravid mothers. In pretest, majority 49(81.7percent) had moderately adequate knowledge, 10(16.7percent) had inadequate knowledge and 1(1.6percent) had adequate knowledge.

**The second objective of the study was to evaluate the effectiveness of planned teaching programme regarding breast feeding problems among primigravid mothers.**

The post test results reveals that among primigravid mothers, majority 50 (83.3percent) had adequate knowledge, 10 (16.7percent) had moderately adequate knowledge and no one had inadequate knowledge. This result depicts that there is significant difference between pre and posttest levels of knowledge regarding

breast feeding problems among primigravid mothers.

**The third objective was to determine the association between posttest levels of knowledge regarding breastfeeding problems among primigravid mothers and selected demographic variables.**

'Chi'-square analysis was used to find out the association between posttest levels of knowledge regarding breast feeding problems among primigravid mothers and selected demographic variables.

Regarding association between posttest levels of knowledge and selected demographic variables, age, educational status, age at marriage, period of gestational weeks are statistically significant at p<0.05 level, whereas religion, occupation, family income, dietary habits, type of family, marital status and breast problems are not statistically significant. It is interpreted that there is a significant association between posttest levels of knowledge regarding breastfeeding problems among primigravid mothers and selected demographic variables. Hence, hypothesis 2 (H2) was accepted.

| Levels of Knowledge | Mean | SD | Mean difference | Paired 't' value |
|---|---|---|---|---|
| Pretest | 18 | 2 | 6 | 19* |
| Posttest | 24 | 2 | | |

**p<0.05 statistically significant

Table .4.14 represents that the pretest knowledge mean score was 18 ± 2 and after the planned teaching programme the posttest mean score was 24 ± 2. The mean difference of pre and posttest knowledge score was 6. The calculated paired 't' test value 19 was higher than the table value 2.09 which is highly significant at p<0.05 level. It is interpreted that there was significant increase in the level of knowledge regarding breastfeeding problems among primigravid mother after the planned teaching programme. Hence hypothesis 1 (H1) is accepted.

**Data on association between posttest levels of knowledge regarding breastfeeding problems among primigravid mothers and selected demographic variables.**

**Association between posttest levels of knowledge regarding breastfeeding problems among primigravid mothers and selected demographic variables. n=60**

| KNOWLEDGE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| S. No | Demographic variables | Inadequate knowledge | | Moderate knowledge | | Adequate knowledge | | Chi -square $\chi^2$ |
| | | N | % | N | % | N | % | |
| 1 | **Age in years** | | | | | | | |
| | 15-20 | 0 | 0 | 1 | 1.7 | 6 | 10 | CV=16.86 |
| | 21-25 | 0 | 0 | 2 | 3.3 | 38 | 63.3 | DF=2 |
| | 26-30 | 0 | 0 | 7 | 11.7 | 6 | 10 | TV=5.99 S* |
| 2 | **Educational status** | | | | | | | |
| | Professional or Honors | 0 | 0 | 0 | 0 | 2 | 3.3 | CV=24.19 |
| | Graduate | 0 | 0 | 2 | 3.3 | 14 | 23.3 | DF=6 |
| | Intermediate or Diploma | 0 | 0 | 2 | 3.3 | 13 | 21.7 | TV=12.59 |
| | High School Certificate | 0 | 0 | 1 | 1.7 | 15 | 25 | S* |
| | Middle School Certificate | 0 | 0 | 0 | 0 | 4 | 6.7 | |
| | Primary School Certificate | 0 | 0 | 1 | 1.7 | 2 | 3.3 | |
| | Illiterate | 0 | 0 | 4 | 6.7 | 0 | 0 | |
| 3 | **Religion** | | | | | | | |
| | Hindu | 0 | 0 | 3 | 5 | 19 | 31.7 | CV=0.55 |
| | Muslim | 0 | 0 | 5 | 8.3 | 25 | 41.7 | DF=2 |
| | Christian | 0 | 0 | 2 | 3.3 | 6 | 10 | TV=5.99 |
| | Others-Specify | 0 | 0 | 0 | 0 | 0 | 0 | NS |
| 4 | **Occupation** | | | | | | | |
| | Legislators, Senior Officials & Managers | 0 | 0 | 0 | 0 | 0 | 0 | CV=4.37 |
| | Professionals | 0 | 0 | 0 | 0 | 1 | 1.7 | DF=16 |
| | Technician and Associate Professionals | 0 | 0 | 0 | 0 | 0 | 0 | TV=26.30 |
| | Clerks | 0 | 0 | 0 | 0 | 0 | 0 | NS |
| | Skilled agriculture & fishery workers. | 0 | 0 | 0 | 0 | 1 | 1.7 | |
| | Craft &Related Trade Workers | 0 | 0 | 0 | 0 | 1 | 1.7 | |
| | Plant &Machine Operators and Assembles | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Elementary Occupation | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Unemployed | 0 | 0 | 10 | 16.7 | 46 | 76.5 | |

| *Table above continued…* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **5** | **Family Income** | | | | | | | |
| | ≥78,063 | 0 | 0 | 1 | 1.7 | 0 | 0 | CV=10.12 DF=5 TV=11.07 NS |
| | 39,033- 78062 | 0 | 0 | 0 | 0 | 1 | 1.7 | |
| | 29,200-39,032 | 0 | 0 | 0 | 0 | 5 | 8.3 | |
| | 19,516-29,199 | 0 | 0 | 6 | 10 | 16 | 26.7 | |
| | 11,708-19,515 | 0 | 0 | 1 | 1.7 | 17 | 28.3 | |
| | 3,908-11,707 | 0 | 0 | 2 | 3.3 | 9 | 15 | |
| | ≤3,907 | 0 | 0 | 0 | 0 | 2 | 3.3 | |
| **6** | **Dietary Habits** | | | | | | | CV=1.51 DF=1 TV=3.84 NS |
| | Vegetarian | 0 | 0 | 2 | 3.3 | 5 | 8.3 | |
| | Non –Vegetarian | 0 | 0 | 8 | 13.3 | 45 | 75 | |
| | Ovo-Vegetarian | 0 | 0 | 0 | 0 | 0 | 0 | |
| **7** | **Types of family** | | | | | | | |
| | Nuclear family | 0 | 0 | 4 | 6.7 | 29 | 48.3 | |
| | Joint Family | 0 | 0 | 6 | 10 | 20 | 33.3 | |
| | Extended family | 0 | 0 | 0 | 0 | 1 | 1.7 | |
| **II.** | **OBSTETRICAL DATA** | | | | | | | |
| **8** | **Marital status** | | | | | | | |
| | Unmarried | 0 | 0 | 0 | 0 | 0 | 0 | CV=0 DF=1 TV=3.84 NS |
| | Married | 0 | 0 | 10 | 16.7 | 50 | 83.3 | |
| | Widowed | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Divorced | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Separated | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Others-Specify | 0 | 0 | 0 | 0 | 0 | 0 | |
| **9** | **Age at marriage (years)** | | | | | | | CV=24.26 DF=2 TV=5.99 S* |
| | 15-20 | 0 | 0 | 8 | 13.3 | 5 | 8.3 | |
| | 21-25 | 0 | 0 | 2 | 3.3 | 32 | 53.3 | |
| | 26-30 | 0 | 0 | 0 | 0 | 13 | 21.7 | |
| **10** | **Period of gestation** | | | | | | | CV=24.01 DF=1 TV=3.84 S* |
| | 25-30 weeks | 0 | 0 | 8 | 13.3 | 5 | 8.3 | |
| | Above 30 weeks. | 0 | 0 | 2 | 3.3 | 45 | 75 | |
| **12** | **Breast problem** | | | | | | | CV=0 DF=1 TV=5.99 NS |
| | Yes | 0 | 0 | 0 | 0 | 0 | 0 | |
| | No | 0 | 0 | 10 | 16.7 | 50 | 83.3 | |

## CONCLUSION

The findings of the study concluded that there was a significant increase in the levels of knowledge, after planned teaching programme among primigravid mothers regarding breast feeding problems. This shows that the planned teaching programme was effective.

## RECOMMENDATIONS

- ✓ A similar study can be conducted on a large sample to generalize the study findings.
- ✓ A similar study can be conducted to find the differences in the knowledge level of primigravida mothers on the basis of various institutional settings such as government and private institutions.
- ✓ A similar study can be conducted to find differences in the knowledge level of the nursing students as well as the nursing staffs.
- ✓ A similar study can be conducted to find the differences in the knowledge level of primigravida mothers and multigravida mothers.

**Acknowledgement:** None

**Conflict of Interest:** None

**Source of Funding:** None

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How to cite this article: Sasikala.V, Sudha.R. Effectiveness of planned teaching programme on the levels of knowledge regarding breast feeding problems among primigravid mothers at Urban Health Center, Kaspa, Vellore. *International Journal of Science & Healthcare Research.* 2021; 6(3): 401-406. DOI: *https://doi.org/10.52403/ijshr.20210766*

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