

Effectiveness of Demonstration on Breastfeeding Technique Among Postnatal Mothers of Newborns in Selected Hospitals, Mangalore.



Nursing

KEYWORDS : Effectiveness; demonstration; postnatal mothers; breastfeeding technique; newborns.

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ABSTRACT

Statement of the problem: Effectiveness of demonstration on breastfeeding technique among postnatal mothers of newborns in selected hospitals, Mangalore. Background: Breastfeeding confers short-term and long-term benefits on both child and mother, including helping to protect children against a variety of acute and chronic disorders. The studies from developing countries show that infants who are not breastfed are 6-10 times more likely to die in the first few months of life than infants who are breastfed. Diarrhoea and pneumonia are more common and more severe in children who are artificially fed, and are responsible for many of these deaths. Objectives of the study: 1. To determine the practice of breastfeeding technique among mothers of newborn as measured by structured observation checklist. 2. To evaluate the effectiveness of demonstration on the practice of breastfeeding technique among mothers of newborns. 3. To find out the association of post-test practice of breastfeeding technique score with selected demographic variables. Method: An evaluative approach with one group pre-test post-test design was used for the study. Purposive sampling technique was used to draw 40 postnatal mothers as samples. The collected data was analyzed by using descriptive and inferential statistics. Conclusion: The findings of the study proved that the demonstration programme is an effective measure to improve the practice of postnatal mothers regarding breastfeeding technique. Education to the postnatal mothers by using any teaching method will help them to improve the practice of breastfeeding technique.

INTRODUCTION:

Breastfeeding is the best way to establish a secure and loving relationship between the mother and her infant. Breast milk is the optimal food for infants. A mother's breast milk has the perfect combination of nutrients needed for her infant's growth and development.¹ The studies from developing countries show that infants who are not breastfed are 6-10 times more likely to die in the first few months of life than infants who are breastfed.² Diarrhoea and pneumonia are more common and more severe in children who are artificially fed, and are responsible for many of these deaths. Other acute infections, including otitis media, Haemophilus influenzae meningitis and urinary tract infection are less common and less severe in breastfed infants.³ Artificially fed children have an increased risk of long-term diseases with an immunological basis, including asthma and other atopic conditions, type 1 diabetes, celiac disease, ulcerative colitis and Crohn's disease.⁴ An estimated 1.3 million lives are lost each year due to inadequate exclusive breastfeeding and another 600 thousand from lack of continuation of breastfeeding with proper complementary feeding. In addition, one third of malnutrition is caused by improper infant and young child feeding.⁵

STATEMENT OF THE PROBLEM

Effectiveness of demonstration on breastfeeding technique among postnatal mothers of newborns in selected hospitals, Mangalore.

OBJECTIVES OF THE STUDY

1. To determine the practice of breastfeeding technique among mothers of newborn as measured by structured observation checklist.
2. To evaluate the effectiveness of demonstration on the practice of breastfeeding technique among mothers of newborns.
3. To find out the association of post-test practice of breastfeeding technique score with selected demographic variables.

HYPOTHESES

All the hypotheses are tested at 0.05 level of significance

1. H₁: The mean post-test scores of breastfeeding technique among postnatal mothers of newborns are significantly higher than that of their pre-test breastfeeding technique scores.
2. H₂: There is a significant association between post-test scores of breastfeeding technique among postnatal mothers of newborns and selected demographic variables.

The **conceptual frame work** selected for the study was based on Weidenbach's Prescriptive Theory.



RESEARCH METHODOLOGY:

An evaluative approach with one group pre-test post-test design was used for the study. Purposive sampling technique was used to draw 40 postnatal mothers as samples. The collected data was analyzed by using descriptive and inferential statistics.

ANALYSIS AND INTERPRETATION:

Sample characteristics:

- It is observed that as high as 75% of the postnatal mothers belong to the age group of 19-27 years and none of the samples were in the age group of <18 and >35 years.
- In relation to education of the mothers, maximum percentage (52.5%) of the samples had high school education, 22.5% had no formal education, 17.5% had primary school education, and 7.5% were graduates and post graduates.
- Maximum percentages (57.5%) of the samples were primipara and 42.5% were multipara.
- The type of family was nuclear among majority (82.5%) of

mothers and joint family in 17.5%.

Practice of postnatal mothers on breastfeeding technique

- In the pre-test majority (75%) of mothers had average practice, 12.5% of mothers had poor practice and 12.5% of mothers had good practice on proper breastfeeding technique. In post-test-I most (95%) of the mothers had good practice on proper breastfeeding technique and 5% had average practice. Whereas in post-test -II, 80% of mothers had good practice on breastfeeding technique and 20% of mothers had average practice and none of them had poor practice.
- The mean post-test-I practice score (17.25 ± 1.444) and the post-test-II practice score (18.1 ± 1.157) was higher than mean pre-test practice score (11.3 ± 2.666). The mean post-test -I practice score (17.25 ± 1.444) was also higher than the post-test-II practice score (18.1 ± 1.157). The median value of post-test -I (17) and post-test -II score (18) was higher than pre-test median value (11). This signifies the effect of demonstration on proper breastfeeding technique.
- In pre-test the mean percentage score was highest (70.5%) in the area of 'mother's position' and least (15%) in the area of 'preparation'. In the post-test-I mean percentage score had increased in the area of 'baby's position' from 65% to 90.62% and highest modified gain (88.23%) is in the area of 'preparation' and least (42.37%) in the area of 'baby's attachment'. In the post-test-I, the mean percentage scores in the areas of 'preparation', 'burping' and 'mothers position' were 90%, 88.5% and 87.5% respectively.
- In post-test-II, the mean percentage score were highest (95%) in the areas of 'preparation' and least (69.4%) in the areas of 'baby's attachment'.
- The mean post-test-I practice score (17.25 ± 1.444) was higher than pre-test practice score (11.3 ± 2.666). The calculated t value (17.59) was greater than table value ($t_{39} = 1.6849$) at 0.05 level of significance.
- The mean post-test-II practice score (18.1 ± 1.157) was higher than pre-test practice score (11.3 ± 2.666). The calculated t value (17.93) was greater than table value ($t_{39} = 1.6849$) at 0.05 level of significance.

The mean post-test-II practice score (18.1 ± 1.157) was higher than post-test-I practice score (17.25 ± 1.444). The calculated t value (6.367) was greater than table value ($t_{39} = 1.6849$) at 0.05 level of significance.

These results showed that the structured demonstration programme conducted by the investigator had helped the subjects to improve their practice on breastfeeding technique.

Association of Post-test Practice Scores and Selected Demographic Variables

- The chi-square test computed between post-test knowledge score and selected demographic variable showed that there was significant association between age and post-test knowledge score ($\chi^2 = 4.126$). There was no significant association between education ($\chi^2 = 0.85$), parity ($\chi^2 = 0.249$), type of family ($\chi^2 = 2.76$) and source of ($\chi^2 = 0.06$) at 0.05 level of significance.

Discussion of the Findings with Other Studies:

a. Assessment of level of practice

The investigator found that in the pre-test majority (75%) of mothers had average practice, 12.5% of mothers had poor practice and 12.5% of mothers had good practice on proper breastfeeding technique.

In post-test-I most (95%) of the mothers had good practice on proper breastfeeding technique and 5% had average practice. Whereas in post-test-II, 80% of mothers had good practice on breastfeeding technique and 20% of mothers had average prac-

tice and none of them had poor practice

A descriptive study was conducted in villages of Panchkula district of Haryana, to study their breastfeeding practices and knowledge regarding usefulness of breastfeeding and factors influencing the breastfeeding practices. All the mothers of infants between 0-6 months were interviewed using a pre-tested semi-structured questionnaire. Time at initiation of breastfeeding, duration of EBF and their understanding about the usefulness of breastfeeding were assessed. Position of the baby during breastfeeding and attachment of the baby's mouth to the breast were assessed by direct observation while feeding. Breastfeeding knowledge of the mother was evaluated. Out of the 77 mothers, 30% and 10% exclusively breastfed their infants till 4 and 6 months of age, respectively. There was 'good attachment' in 42% mother-infant pairs and infants were held in 'correct position' by 60% mothers.⁶

The above study concluded that postnatal mothers had inappropriate practice regarding breastfeeding technique.

b. Evaluation of the Effectiveness of demonstration

The study result showed that after the administration of structured demonstration programme, the mean post-test-I practice score (17.25 ± 1.444) was higher than pre-test practice score (11.3 ± 2.666). The calculated t value (17.59) was greater than table value ($t_{39} = 1.6849$) at 0.05 level of significance.

The mean post-test-2 practice score (18.1 ± 1.157) was higher than pre-test practice score (11.3 ± 2.666). The calculated t value (17.93) was greater than table value ($t_{39} = 1.6849$) at 0.05 level of significance.

The mean post-test-2 practice score (18.1 ± 1.157) was higher than post-test-I practice score (17.25 ± 1.444) the calculated t value (6.367) was greater than table value ($t_{39} = 1.6849$) at 0.05 level of significance.

The above study findings are supported by a study which was a quasi-experimental pre-test-post-test design and was conducted in Japan to develop a self-care program for breastfeeding aimed at increasing mothers' breastfeeding confidence and to evaluate its effectiveness. An intervention on a breastfeeding self-care program was created to improve mothers' self-efficacy for breastfeeding. A convenience sample of 117 mothers received this program during their postpartum hospital stay. The Breastfeeding Self-Efficacy Scale Short Form (BSES-SF) score of the intervention group rose significantly from 34.8 at early postpartum to 49.9 at one month after birth ($p < 0.01$). For the control group, the score rose from 39.5 at early postpartum to 46.5 at one month after birth ($p = 0.03$). The early postpartum fully breastfeeding rate was 90% for the intervention group and 89% for the control group. At one month postpartum, the fully breastfeeding rate declined significantly to 65% for the control group compared to 90% for the intervention group ($p = 0.02$). Results indicate that the Breastfeeding Self-Care Program increased mothers' self-efficacy for breastfeeding and had a positive effect on the continuation of breastfeeding.⁷

The present study and supporting study reveal that majority of the postnatal mothers had poor practice on breastfeeding technique and after an effective intervention programme the practice level has increased. This finding emphasizes the need to improve the mothers practice on breastfeeding technique with appropriate interventions.

c. Association of the practice scores with demographic variables

The present study showed that there was a significant association of post-test practice score with age of postnatal mothers as

the calculated value (4.126) was more than the table value (3.84) at 0.05 level of significance.

The above study findings are supported by an observational, descriptive, cross-sectional study was done at Al Jamahiriya and Al Fateh Hospital in Benghazi, Libya, from November 2009 to February 2010 to assess the correct position, attachment and effective suckling in the breastfeeding of infants as practiced by mothers attending hospitals at Benghazi. One hundred ninety-two mother-neonate units were observed for mother's and baby's position, attachment and effective suckling using WHO B-R-E-A-S-T- Feed observation form. Grading of positioning, attachment and suckling was done according to the score of various characteristics. About 15% of the infants were about a week old (early neonatal period) and 85% were in the late neonatal period. There was poorer positioning among primipara (24.0%) than multipara (8.9-12.5%) mothers. Poorer attachment was also more evident among primipara (30.0%) compared to multipara (20.9%) mothers. Age and Parity was significantly associated with poor position ($P=0.028$) and attachment ($P=0.002$). Poor attachment was related to cracked nipples and mastitis. Preterm and low birth weights were significantly associated with poor attachment and poor effective suckling. Poor suckling was more (42.8%) in the early neonatal period than late neonatal period (32.9%). Young (<20 years) and primipara mothers were more in need of support and guidance for appropriate breastfeeding techniques. It is recommended that each mother should be observed for mothers and infant's positioning and attachment at the onset of breastfeeding and if needed subsequent counseling should be given on correct positioning and attachment.⁸

The present study and supporting study reveal that there is a significant relationship of post-test practice scores with age.

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