



EFFECT OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FORMULA FEEDING AND ITS COMPLICATIONS AMONG MOTHERS: A QUASI EXPERIMENTAL STUDY

Archana K Raj

Associate Professor, Child Health Nursing, Sree Gokulam Nursing College, Trivandrum.

ABSTRACT

A one group pretest posttest design was used to find out effect of Planned Teaching Programme on knowledge regarding Formula Feeding and its Complications among Mothers. The setting was selected areas of Uttarahalli, Bangalore. The sample includes 60 mothers selected by non –probability convenience sampling technique. The Planned Teaching Program on formula feeding and its complication was prepared. The findings showed that the mean posttest knowledge score of the subjects which was 85.56% was higher than the mean pre-test score of 53.69%. It was found that the improvement in knowledge score was significant. There was a significant association between age, educational status and number of children and the knowledge score of the respondents at both the pre-test and posttest levels. Findings of the Study indicate PTP was significantly effective in improving the knowledge score of mothers on formula feeding and its complications.

KEYWORDS : Formula feeding; breast feeding; complications; mothers; planned Teaching Programme; Quasi Experimental Approach.

INTRODUCTION

The Breast milk is nature's miracle food and breast feeding is the best way to feed an infant. Breast milk is the only food for millions of babies. It greatly improves the quality of life by providing adequate nutrition, resistance to infection, mental and emotional satisfaction. Breast feeding patterns have changed as the years passed. Now a day's mothers are more interested in giving formula feeding to their babies. Illnesses are more common with babies who receive breast milk substitutes including respiratory illness, ear infection, diarrhea, allergies etc. An exclusive breast feeding baby is 14 times less likely to die from diarrhea, 4 times less likely to die from respiratory diseases and 3 times less likely to die from infections as compared to a bottle fed baby.

Studies have been done related to the mother's perspectives, experiences, and decision making associated with breastfeeding. Early studies concentrated on demographics such as marital status, education, race/ethnicity, employment status, age, and socioeconomic factors. Women who choose breastfeeding are more often married, White or Hispanic, 30 years or older, college educated, and living in the Pacific Northwest or New England.

Maternal perceptions of entire pregnancy and birth experience was accumulated in a survey of 1,573 ethnically, racially, and socioeconomically representative American women by Childbirth Connection in partnership with Lamaze International in 2006. Although pregnancy and birth were the primary foci of this survey, it provided some limited insight into the breastfeeding decision as well. The survey reported that prior to birth, 61% of mothers had decided to breastfeed, but only 51% were breastfeeding 1 week following birth. Mothers reported on the whole (66%) that the hospital staff encouraged them to breastfeed but were presented with conflicting behaviors such as giving their infant a pacifier (37%), formula or water supplementation in the hospital (29%), and formula to take home (49%).

Mothers' perceptions of hospital staff's attitudes were predictive of breastfeeding failure by 6 weeks. Mothers who reported that they perceived neutrality on the part of the hospital staff in relation to their decision to breastfeed were significantly more likely to wean early. Taveras et al. (2004) reported that mothers who discontinued breastfeeding within the first weeks following birth had problems with infant latching on or sucking and reported that a health-care provider recommended formula supplementation. Mothers expected that their health-care provider would have the knowledge and skill to assist them with these common problems. However, they discovered that neither their

obstetrician nor pediatrician assessed them during a breastfeeding session or tried to adequately diagnose the source of the concern. Instead, they were given commercial literature, a referral to a lactation consultant, or were advised to supplement with formula. A crucial finding in this study was that mothers who received breastfeeding advice from books and other print media were less likely to discontinue breastfeeding than those receiving information from health-care providers.

MATERIALS AND METHODS

The research approach used was quantitative approach. The Research Design selected for the study was a non-experimental design one group pretest posttest design. The setting was selected areas of Uttarahalli, Bangalore. The sample includes 60 mothers selected by non –probability convenience sampling technique. The Planned Teaching Program on formula feeding and its complication was prepared by the researcher after thorough literature search and ensuring content validity. The Pilot Study was conducted with 6 mothers. A structured knowledge questionnaire on selected areas of formula feeding and its complications based on review of research and non-research literature and opinion of experts was developed. The questionnaire contained 32 multiple-choice questions. The reliability of the tool was established by split half technique and the reliability co-efficient were calculated to be 0.92. The formal permission was obtained from medical officers of PHC Uttarahalli. The investigator personally visited all respondents, introduced her and explained the purpose of the study and ascertained the willingness of the participants. The respondents were assured anonymity and confidentiality of the information provided by them.

RESULTS

Socio demographic data

- Majority of subjects (70%) was from the age group of 21-25 years and the next highest number of subjects (16.67%) was from the age group of 31-35 years. Majority of subjects (63.34%) was graduates followed by (13.33%) have primary education and 11.67% has secondary education. 8.33% and 3.33% were having PUC and PG level of education.
- Majority of subjects (36.67%) were house wife, (23.33%) were private employees and 21.67% subjects were government employees and 18.33% subjects were self-employed.
- Majority of subjects (53.33%) have two children. The next highest percentage (30%) has one child and 13.33 % subjects have three children and 3.34% subjects have children above three.

Effect of PTP on knowledge**Table 1: Pretest, posttest mean scores, SD and t value**

| Aspects | Knowledge scores (%) | | | | | | Paired t value |
|--|----------------------|-------|-----------|-------|-------------|-------|----------------|
| | Pre test | | Post test | | Enhancement | | |
| | Mean | SD | Mean | SD | Mean | SD | |
| Breast feeding | 63.7 | 1.844 | 94.2 | 1.229 | 30.5 | 2.171 | 10.89* |
| Formula feeding and types of formulas | 43.88 | .912 | 86.17 | 1.171 | 42.29 | 1.347 | 14.56* |
| Complications of formula feeding | 51.5 | 1.361 | 79.79 | 1.279 | 28.29 | 1.901 | 9.095* |
| Guidelines for selection and preparation of formula feed | 50.87 | 1.526 | 80.25 | 1.615 | 29.38 | 1.662 | 10.965* |
| Combined | 53.69 | 3.303 | 85.56 | 3.843 | 31.87 | 4.179 | 18.92* |

*Significant at $p < 0.05$ level.

Association between knowledge scores with demographic variables

The chi-square test at a level of significance of 5% was applied to check the association of demographic variables with knowledge score. The variables occupation, income and type of family had no significant association with the knowledge score of the respondents in pretest since the calculated chi-square value was less than the critical Chi-square value at a level of significance of 5%.

DISCUSSION

The findings showed that the mean posttest knowledge score of the subjects which was 85.56% was higher than the mean pre-test score of 53.69%. It was found that the improvement in knowledge score was significant. There was a significant association between age, educational status and number of children and the knowledge score of the respondents at both the pre-test and posttest levels. Findings of the Study indicate PTP was significantly effective in improving the knowledge score of mothers on formula feeding and its complications. This was supported by Dillaway and Douma (2004) who found that mothers and health-care providers had very different ideas about what constituted breastfeeding support. Approximately 75% of mothers surveyed in this study reported at least two breastfeeding problems that led to early weaning. They reported that advice and encouragement of their health-care provider was superficial and insufficient. However, the mothers' physicians reported that they were highly supportive. Providers considered support as answering questions posed by mothers, providing written information, or making a referral to a lactation consultant, whereas the mother wanted praise and encouragement, accurate information, observation of the breastfeeding behavior, diagnosis of the problem, and a solution.

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