



A Pre Experimental Study To Assess The Effectiveness Of Structured Teaching Program On Knowledge And Attitude Of Mothers Regarding Breast Feeding And Its Importance Among Their Infants In Selected Rural Areas Of Ludhiana, Punjab

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Abstract: A newborn babies needs are pretty clear, to be clean; to be clean, to be comfortable and to be fed. Breast milk plays a vital role for the health and the growth of newborn. Babies who were exclusively breastfed for the first six months experience fewer infections than those who were either breastfed for a brief period of time or fed formula in addition to breast milk. Hence, researchers felt the importance of assessing the knowledge and attitude of mothers regarding breastfeeding and its importance. Children are priceless resources and any nation neglecting them would lose its perils. In the present study qualitative research approach was used with pre experimental study. The study was performed in selected rural areas of Ludhiana, Punjab. The data was collected by self-structured questionnaires. The results showed that there was significant differences between pretest and post test knowledge of mothers regarding breast feeding and its importance among infants. There was significant differences between pretest and posttest attitude scores of mothers. So by this study we concluded that there is continuous need of health education in the rural areas.

Keywords- Mothers, Knowledge, Attitude, Breast feeding.

I. INTRODUCTION

Breastfeeding is the best natural food and breast milk is the best milk. The basic food of infants is mother's milk. Breastfeeding is the most effective way to provide a baby with a caring environment and complete food. It meets the nutritional as well as emotional and psychological needs of the infant. But recently there is tendency to replace the natural means of infant feeding and introduction of breast milk substitutes. So breastfeeding deserves encouragement from all concerned in welfare of children.

The act of feeding breast milk to an infant. Babies can be fed directly from the mother's breast, or breast milk can be pumped and then fed to the baby from a bottle. Breast milk contains calories, vitamins, minerals, and other important nutrients that help an infant grow and develop. It also contains antibodies, which help protect the infant against some infections. Breastfeeding also helps protect the infant and mother against certain diseases or conditions. Also called nursing. NIH (2023) Breastfeeding is one of the most effective ways to ensure child health and survival. However, contrary to WHO recommendations, fewer than half of infants under 6 months old are exclusively breastfed. Breastmilk is the ideal food for infants. It is safe, clean and contains antibodies which help protect against many common childhood illnesses. Breastmilk provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one third during the

second year of life. Breastfed children perform better on intelligence tests, are less likely to be overweight or obese and less prone to diabetes later in life. Women who breastfeed also have a reduced risk of breast and ovarian cancers.

Exclusive breastfeeding means feeding a baby only breast milk, with no other food or liquids, not even water for the first six months of life. The only exceptions are oral rehydration solutions, or drops or syrups of vitamins, minerals, or medicines. The World Health Organization (WHO) and UNICEF recommend that babies start breastfeeding within the first hour of birth and be exclusively breastfed for the first six months. Exclusive breastfeeding can have a significant impact on child mortality. It can also help babies develop a strong immune system, gain weight healthily, and have nutritional benefits.

The composition of breast milk varies at various stages of postnatal period to suit the needs of the baby. Colostrum: it is the first milk secreted during the first three days after delivery. It is thick and yellow in color and rich in antibodies and vitamin A, D, E and K. Transitional milk: its milk secreted during next 2 weeks. Mature milk: milk that follows transitional milk. Its thinner and watery but has all the nutrients for optimum growth of baby. Foremilk: milk secreted at the start of feed, rich in proteins, sugar, vitamins, and water. Hind milk: it comes later towards the end of the feed and is rich in fat and energy and satisfies the baby's hunger.

Colostrum is the first stage of breast milk. It occurs during pregnancy and lasts for several days after the birth of the baby. It is either yellowish or creamy in colour. It is also much thicker than the milk that is produced later in breastfeeding. Colostrum is high in protein, fat-soluble vitamins, minerals, and immunoglobulins.

Immunoglobulins are antibodies that pass from the mother to the baby and provide passive immunity for the baby. Passive immunity protects the baby from a wide variety of bacterial and viral illnesses. American Pregnancy Association (2024) Human breast milk (HBM) is essential for the infant's growth and development right after birth and is an irreplaceable source of nutrition for early human survival. For this reason, the World Health Organization and United Nations Children's Fund recommend exclusive HBM feeding for at least 6 months after birth and to continue for up to 2 years of age or beyond. Components of human milk are macronutrients like iron, calcium, sodium, iodine, zinc etc, carbohydrates, proteins, fats, vitamin D, K, B6, B12 more than 20 minerals and some hormones and growth factors.

OBJECTIVES OF THE STUDY

1. To assess the pre-test and post-test knowledge of mothers regarding breast feeding and its importance among their infants.
2. To assess the pre-test and post-test attitude of mothers regarding breast feeding and its importance among their infants.
3. To compare the pre-test and post-test knowledge and attitude of mothers regarding breast feeding and its importance among their infants.
4. To find out relationship between pre-test and pre-test knowledge of mothers regarding breast feeding and its importance among their infants with selected demographic variables i.e., age (In years), educational status (In standards), occupational status, weight of child at birth (In Kg), type of feeding provided immediately after birth, number of children, family monthly income (in Rs), type of family, mode of delivery, source of information.
5. To find out relationship between pre-test and pre-test attitude of mothers regarding breast feeding and its importance among their infants with selected demographic variables i.e., age (In years), educational status (In standards), occupational status, weight of child at birth (In Kg), type of feeding provided immediately after birth, number of children, family monthly income (in Rs), type of family, mode of delivery, source of information.

METHODOLOGY

The focus of the study was to assess the effectiveness of structured teaching program on knowledge and attitude regarding breast feeding and its importance among their infants in selected rural areas of Ludhiana, Punjab. A quantitative research approach and pre-experimental design was used. The sample of 60 mothers were selected by using convenient sampling technique. The data was collected by a self-structured questionnaire. The conceptual frame work of the study was based on modified Ludwing Von Bertalanffy (1968). The pilot study was conducted in the month of April on 6 mothers of infants from selected rural areas of Ludhiana, Punjab. The reliability of the tool was calculated by split half method. Final study was conducted in the month of April at Talwandi Rai on 60 mothers. Analysis of study was done by using descriptive and inferential statistics.

MAJOR FINDINGS

- In the pre-test, 58.3% of mothers had poor knowledge, and 41.7% had good knowledge. In the post-test, 61.7% had good knowledge, and 13.3% had poor knowledge. There was an increase in excellent and good knowledge levels about breast feeding and its importance among infants in the post-test.
- Before the test, 40 mothers (66.66%) had a cheerful outlook after the test; all 60 mothers (100%) had a cheerful outlook regarding breast feeding and its importance among their infants.
- Mothers' knowledge and attitude regarding breast feeding and its importance among their infants was assessed before and after an intervention. The mean knowledge score increased from 18.63 to 21.46 and the mean attitude score increased from 77.60 to 84.75. The difference between pre-test and post-test scores was highly significant for both knowledge and attitude ($p \leq 0.05$ and $p \leq 0.01$, respectively). The study found a significant improvement in mothers' knowledge and attitude regarding breast feeding and its importance among their infants. The null hypothesis was rejected.
- That in pre-test maximum mean knowledge score 14.31 was found in mothers between 20-25 years minimum mean score 1 found among those who were between 36-40 years. Whereas in post-test maximum 21.24 mean score of knowledge was found in mother who were between 26-3 and minimum 18.00 found who were between 36-40 years. The calculated ANOVA value (.855, 1.294) between and within groups were found non-significant at $p \leq 0.05$ level. Hence, this is inferred that there was no relationship between pre-test and post-test knowledge of mothers regarding breast feeding and its importance among their infants with age (in years).
- The pre-test maximum 19.63 mean score of knowledge were found in mothers who were graduate or above and minimum mean knowledge 12.93 was found in those who were educated up to 11 mean score of knowledge were found in mothers who were graduate or above and minimum mean knowledge score 19.97 was found who were up to 11 calculated ANOVA value (14.156, 3.339) between and within group was found significant at $p \leq 0.05$ level. Hence, it inferred that there was association between pre-test and post-test of knowledge of mothers regarding breast feeding and its importance among their infants with educational status (in standard).
- In pre-test maximum mean knowledge score 21.00 was found in mothers who were government employed and minimum mean knowledge score 13.12 was found in mothers who were home makers. Whereas in the post-test, a maximum 24.50 mean score knowledge was found in mothers who were government employees and minimum mean knowledge 20.18 was found in those mothers who were home Maker. In pre-test and post-test the calculated ANOVA value (6.624* & 2.489*) between and within group found significant at $p \leq 0.05$ level. Hence, this inferred that there was relationship between pre-test and post-test level of knowledge among mothers with occupation status.
- In pre-test maximum mean knowledge score 14.37 was found in mothers who had the weight of their child at birth between 1.5-2.5 kg and minimum mean knowledge score 13.42 was found who had the weight of child between 2.6-3.00 kg. Whereas in the post-test, maximum mean knowledge score 21.71 was found in mothers who had the weight of their child at birth between 3.1-3.5 kg and minimum mean knowledge score 19.63 was found who had weight of child between 3.6-4 kg. In pre-test and post-test the calculated ANOVA value (.191, .855) between and within groups found non-significant at 0.05 level. Hence, this inferred that there was no relation between pre-test and pre-test of knowledge of mothers regarding breast feeding and its importance among their infants with Weight of child at birth.
- The pre-test maximum 14.00 mean score of knowledge were found in mothers whom child was on artificial feeding and minimum mean knowledge score 13.83 was found whom child was on cow milk.

Whereas in post-test; maximum 23.25 mean score of knowledge were found in those mothers whose children were on artificial feeding after birth and minimum mean knowledge score 18.67 was found whom children were on cow milk. The calculated ANOVA value (.004, 1.950) between and within group was found non- significant at $p \leq 0.05$ level. Hence, this inferred that there was no relationship between pre-test and post-test knowledge of mothers regarding breast feeding and its importance among their infants with type of feeding provided immediately after birth.

- The pre-test maximum 14.26 mean score of knowledge were found in mothers who had 2 children and minimum mean knowledge score 13.25 was found among those who had 1 child. Whereas in post-test; maximum 21.26 mean score of knowledge were found in mothers who had 2 children and minimum mean knowledge score 20.00 was found who had >3 children. The calculated ANOVA value (.264, .751) between and within groups found non - significant at $p \leq 0.05$
- level. Hence, this inferred that there was no relationship between pre-test and post-test knowledge of mothers regarding breast feeding and its importance among their infants with the number of children.
- The pre-test maximum mean knowledge 14.86 was found in mothers who had monthly income between 5001-10,000 Rs and minimum mean knowledge score 13.43 was found who had monthly income between 10,001-15000 Rs. Whereas in the post-test; maximum 21.57 mean score of knowledge were found in mothers who had income between 5001-10,000 Rs. /Month and minimum mean knowledge score 19.75 was found who had ≥ 15001 Rs. /Month. In pre-test and post-test the calculated ANOVA value (.405, .648) between and within group found non- significant at $p \leq 0.05$ level. Hence, this inferred that there was no relationship between pre-test and post-test of knowledge of mothers regarding breast feeding and its importance among their infants with family monthly income.
- The pre-test maximum 14.16 mean score of knowledge were found in mothers who belonged to joint families and minimum mean knowledge 13.88 was found in those mothers who belonged to nuclear families. Whereas in post-test; 21.79 mean score of knowledge were found in mothers who belonged to joint families and minimum mean knowledge 20.29 was found who belonged to nuclear families. The calculated ANOVA value (.066, 2.186) between and within groups was found non- significant at $p \leq 0.05$ level. Hence, this inferred that there was no relationship between pre-test and pre-test of knowledge of mothers regarding breast feeding and its importance among their infants with type of family.
- In pre-test mean knowledge score of 13.5 was found in mothers whose mode of delivery was forceps while in post-test 22.50 mean score of knowledge was found in mothers whose mode of delivery was forceps. The calculated ANOVA value (.146) was found to be non-significant at $p \leq 0.05$ level and 4.393 significant at $p \leq 0.05$ level. Hence, this inferred that there was relationship between pre-test knowledge of mothers but no relationship between knowledge of mothers regarding breast feeding and its importance among their infants with type of family.
- The pre-test maximum 15.48 mean knowledge score was found in mothers who got information from health personnel and minimum mean knowledge score 12.78 by those who got information through electronic media. Whereas in the post-test; maximum 21.81 mean knowledge score was found in mothers who got information from Health personnel and 19.67 minimum mean score by those who got information from their Family/friends. In pre-test and post-test the calculated ANOVA value (.801, 1.087) between and within group found non- significant at $p \leq 0.05$ level. Hence, this is inferred that there was no relationship between pre- test and post-test knowledge of mothers regarding breast feeding and its importance among their infants with health facilities (nearby) .

LIMITATIONS

- The sample size was just 60 mothers, thus broad generalizations are problematic.
- The research was limited to rural mothers in Ludhiana, Punjab.
- The research will not seek to measure the mothers' knowledge and attitudes about breast feeding and its importance.

CONCLUSION

In the present study mothers were distributed in experimental group according to age (in years), educational status (In standards), occupational status, weight of child at birth (In Kg), type of feeding provided immediately after birth, number of children, family monthly income (in Rs), type of family, Mode of delivery, source of information. The present study concluded that the difference between pre-test and post-test mean knowledge and attitude score regarding breast feeding and its importance among their infants was observed highly significant thus structured teaching programme was significantly affect for increasing the knowledge and attitude of mothers regarding breast feeding and its importance among their infants at $p \leq 0.05$ and $p \leq 0.01$ level were significant. In pre-test and post-test, relationship of knowledge score with educational status and occupational status was found significant whereas in pre-test and post-test relationship of knowledge with age (in years), weight of child at birth, type of feeding provided immediately after birth, number of children, family monthly income (in Rs), type of family, mode of delivery, source of information was found non-significant. In pre-test mean attitude score's relationship with type of family was found significant and age (in years), weight of child at birth, type of feeding provided immediately after birth, number of children, family monthly income (in Rs), mode of delivery, source of information, occupational status and educational status was found non-significant, whereas in post- test educational status was found significant but type of family, age (in years), weight of child at birth, type of feeding provided immediately after birth, number of children, family monthly income (in Rs), mode of delivery, source of information, occupational status found non-significant.

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