

A pre-experimental study to assess the effectiveness of Planned Teaching Program on Knowledge regarding Human Milk Banking among mothers in selected hospitals of Patiala, 2024

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Abstract:

A pre-experimental study with one group pre and posttest design was adopted for the study. Then using non-probability convenient sampling technique 60 mothers were selected from the hospitals who met inclusion criteria. The overall pretest mean knowledge scores was 5.50 with SD of 2.22 and the posttest mean knowledge scores was 9.78 with SD of 1.53. The obtained paired “t” test value was 15.739 which shows statistical significance at $p < 0.0001\%$

Key words: Effectiveness, Planned Teaching programme, Human Milk Banking and knowledge.

INTRODUCTION

Breast milk is widely recognized as the most ideal form of nutrition for infants, contributing to their growth, development, and immunity. Human milk banking, an essential service that provides donor milk to infants in need, is still not fully understood by many mothers. Improving knowledge about human milk banking is crucial for enhancing its acceptance and utilization. Therefore, planned teaching programmes play a pivotal role in increasing awareness and knowledge on this topic among mothers.

Breast milk is the best natural feeding and breast milk is the best milk. The basis food of infant 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. Milk banks serve a vital function by providing human milk for premature infants who, for a variety of reasons, would otherwise not have access to human milk.

The recipient of the human milk banking are vulnerable preterm and sick babies and special cares where mothers are unable to supply sufficient milk for their babies due to if mother having disease such as infectious diseases such as tuberculosis and venereal diseases, if mother's are taking medications which might be harmful to the infant, mother is on antiretroviral therapy or taking chemotherapy for cancer and on radio pharmaceuticals. Breast milk donation also provides benefits to mother such as reduces the risk of cancer of breast and ovaries, reduces the risk of osteoporosis in later life, help to regain the contour of body, helps in birth spacing, reduces the risk of mastitis and make breast feel more comfortable. Lactating mothers donate breast milk, the milk is then collected and then undergoes a pasteurization process and then analysis of essential micronutrients content is done. After the quality check, is subsequently stored at low temperature. There is a strict procedure is to be followed, which involves assessment and thorough screening of the mother before the milk is collected.

Anu Paul, Jeena K Babu, et al [2023] conducted a descriptive study to assess the Knowledge Regarding Human Milk Banking among Women in Selected Hospital at Kottayam District, Convenient sampling technique was used to select samples from prenatal and postnatal mother's and mothers of under five children. The study sample consists of 30 parents who came to the outpatient department and by standers of admitted child who got admitted in wards of Little Lourdes Mission hospital. Data was collected using structured questionnaire to assess the knowledge regarding Human Milk Bank among women. The result showed that among 30 samples 22(73.3%) women had only average knowledge regarding human milk bank. Only 8(26.66%) had good knowledge regarding human milk bank and nobody had poor knowledge regarding human milk bank. The study findings revealed that there are no significant association between knowledge regarding human milk bank and demographic variables such as age and education. There is association between knowledge regarding human milk bank and occupation.

Shruti Kasar, Vanita Gaikwad, Sara Tomy, Pournima Naik [2023] conducted a pre experimental study to assess the Effectiveness of Structured Teaching Program on knowledge regarding preservation of human milk at home among working women's in selected schools, Total 60 working women's sample were selected by Probability simple random sampling technique as per the inclusion criteria. Structured Knowledge Questionnaire was used in this study. The pre-test average knowledge score was 13.98 with standard deviation of 2.93. The post-test average knowledge score was 27.45 with standard deviation of 1.78. The test statistics value of the paired t test was 29.32 with p value 0.00. The p value less than 0.05, hence reject the null hypothesis. That means there is significant difference in pre and post-test knowledge.

WHO recommends exclusive breast feeding for the first six months, supplemented breast feeding is recommended until at least two years and then as long as the mother and child wishes. Breast milk it is easily digestible by the newborns intestine, offers a variety of immunologic properties, effective in protecting the baby from respiratory tract infection gastrointestinal infections and numerous allergies. It has got bacteriostatic functions against gram positive bacteria and also acts as a laxative agent in neonates.

The preferred food for newborn infant is the mother's own milk irrespective of baby's gestational age but sometimes particularly in the case of sick and immature infants, the mother is unable to maintain her lactation and an alternative food is required. In

1800 BC the infant have been directly breastfeed by wet nurse. A wet nurse is a lactating woman who breast feeds another baby. While this may seem to be a taboo in our culture wet nurse was actually popular until the invention of formulas. The practical alternative diets for baby who are unable to breast feed are banked human milk or commercially available formula. The term human milk banking refers to the collection, storage and processing of human milk donated by lactating mothers for infants other than their own.

The world's first human milk was established in 1909, in Vienna, Austria. Asia's first human milk bank was set up at Lokmanya Tilak Municipal Hospital in 1989. The first human milk bank in Pune city was inaugurated in the Deenath Mangehkar Hospital.

Human milk are crucial for India because the practice of women donating milk on humanitarian grounds is common, since then some 25 human milk banks across India - most of were located in the western states of performing vital services for premature babies requiring temporary intervention in case of delayed lactation abandonment or illness, these banks also been a life savers for infants.

MATERIALS AND METHOD

A pre experimental with one group pre and post test design was adopted for the study. The study sample comprised of 60 mothers were selected from hospitals of Patiala. Non- probability convenient technique was used to collect the data. The tool consists of three parts: Part A: Socio Demographic Variables to obtain information on aspects like age, religion, education, occupation, no of children, previous knowledge and source of information. Part B: Structures Knowledge questionnaire. The questionnaire

was consist of 15 items to assess the knowledge regarding human milk banking. one mark was awarded for the correct answer and no mark was awarded for wrong answer. The total score was 15.

RESULTS

The results showed that majority (56.7%) of mothers had inadequate knowledge and after planned teaching programme there was majority(63.3%) of mothers had moderate level of knowledge. This was supported by the study on These findings are similar with previous study conducted by Sheela et al. (2020) evaluated the knowledge and attitude of postnatal mothers on human milk banking. The results showed that 90% of mothers had poor knowledge before the intervention, while significant improvements were observed post-intervention, with 91.7% achieving adequate knowledge.

Comparison of pre test and post test knowledge of Mothers on human milk banking in experimental group

Knowledge of Mothers on human milk banking				
One group pre test and post test				
	Mean	SD	Mean%	T
Pre test knowledge score	5.5	2.22	36.70	15.739*
Post test knowledge score	9.78	1.53	65.20	
t = 15.739*				

N=60

Maximum Score = 15

*Significant at $p < 0.001$ level

There was a significant difference between the pre knowledge and post knowledge mean score of mothers on human milk banking which was statistically significant at $p < 0.001$ level.

Hence it was inferred that planned teaching programme increases the knowledge score of the group, so the research hypothesis(H_2)

Post knowledge score shows that 63.3% mothers on human milk banking were having good knowledge.

Hence it was inferred that planned teaching programme was increases the knowledge score of mothers on human milk banking was significant at $p < 0.001$ level.

CONCLUSION

The findings of the study revealed that planned teaching programme significantly increases knowledge level of mothers on human milk banking.

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