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Effectiveness of Structured Teaching Programme on Knowledge Regarding Breast Feeding Among Mothers of Under Five Children

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ABSTRACT

Introduction *Breastfeeding is safest, cheapest and best protective food for infants. Superiority of human milk is due to its superior nutritive and protective value. It is perfect food for infants and provides total nutrient requirements for the first six months of life* ***Methods:*** *A pre-experimental with one group pre-test and post-test research design was used in this study. Purposive sampling technique was used to select the sample and the sample size was 50 mothers of fewer than five children. Data were collected by using structured knowledge questionnaire regarding breast feeding. Analysis of the data was done by using descriptive and inferential statistics.* ***Result:*** *The Result showed that out of 50 samples the overall the pretest Mean score of mothers of under five children was 17.36 (SD=4.46) and post test mean score increased to 23.82 (SD=4.64). The comparison mean difference in the present study was 06.46 (SE of mean D = 1.91) with paired 't' value of 15.45. Table value of't' at 0.05 level of significance and 29 degrees of freedom is 2.045. As the calculated value was more than the table value, it was clearly found that the Structured Teaching Programme was effective in improving the knowledge of mother of under five children regarding breast feeding. There for the hypothesis H_1 was accepted". There was no significant association between the demographic variables such as age, fathers' education, mothers' education, type of residential areas, type of family sources of information regarding breast feeding with post test knowledge scores of mothers of under five children. Hence the hypothesis (H2) has been rejected.*

Keywords *– Effectiveness, knowledge, structured teaching programme, Breast feeding*

INTRODUCTION

Breastfeeding is the most and best natural feeding and breast milk is best milk. The basic food of infant is mother's milk. Breastfeeding is the most effective way to provide a baby with 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 the welfare of children.

There are several nutritive values of breast milk, like Breast milk contains all the nutrients in the right proportion which are needed for optimum growth and development of the baby upto four to six months. It is essential for brain growth of the infant because it has high percentage of lactose and galactose which are important components of galactocerebroside. It provides all nutrients, vitamins, minerals, electrolytes and water in the right proportion for the infant which are necessary for the maturation of the intestinal tract and breast milk provides 66

calories per 100 ml and contains 1.2g protein, 3.8g fat, 7g lactose and vitamin _A '170 TO 670 IU, vitamin _C'2 to 6mg, vitamin _D' 2.2 IU, calcium 35mg, phosphorus 15mg in 100 ml. total amount of milk secretion per day is about 600 to 700 ml, which is sufficient for the baby. Its composition is ideal for an infant.

The World Health Organization (WHO) and The American Academy of Pediatrics (AAP) emphasize the value of breastfeeding for mothers as well as children. Both recommend exclusive breastfeeding for the first six months of life. The American Academy of pediatrics (AAP) recommends that this will be followed by supplemented breastfeeding for at least one year, while WHO recommends that supplemented breastfeeding continue up to two years or more. While recognizing the superiority of breastfeeding, regulating authorities also work to minimize the risks of artificial feeding.

Breastfeeding is an important public health strategy for improving infant and child morbidity and mortality, improving maternal morbidity, and helping to control health care costs. Breastfeeding is associated with a reduced risk of otitis media, gastroenteritis, respiratory illness, sudden infant death syndrome, necrotizing enters colitis, obesity, and hypertension]. Variables that may influence breastfeeding include race, maternal age, maternal employment, level of education of parents, socio-economic status, insufficient milk supply, infant health problems, maternal obesity, smoking, parity, method of delivery, maternal interest and other related factors.

Breastfeeding should be initiated within first hour to one hour of birth or as soon as possible. It should be initiated within four hours after cesarean section delivery. Early suckling provides warmth, security and _colostrum 'the baby's first immunization. Although little in amount, the first milk, colostrums, is most suitable and contains a high concentration of protein and other nutrients, the baby needs. It is rich in anti-infective factors and protects the baby from respiratory infections and diarrheal diseases. Mother should be demonstrated about the techniques of breastfeeding. Rooming- in or bedding – in should be done with infant and mother as soon as possible to prevent separation. Mother should be advised for breastfeeding up to 4 to 6 months and on demand feeding.

Major problems exist among the post natal mother would be ignorance of mother regarding breast care and breast-feeding lead to suppression of lactation. Due to inadequate breast-feeding maternal problems like breast engorgement, mastitis, breast abscess, cracked and sore nipple and sub involution of uterus results with higher risk of post partum hemorrhage. New born once not supplied with breast milk were at risk of getting Gastrointestinal tract infection and respiratory tract infection, iron deficiency anemia, allergy disorders and it gradually increases Neonatal Mortality Rate.

OBJECTIVES

1) To assess the pretest knowledge regarding the breast feeding among mothers of under five children
2) To develop and administer Structure Teaching Programme regarding the breast feeding among mothers of under five children
3) To assess the post-test knowledge regarding the breast feeding among mothers of under five children

4) To assess the effectiveness of Structure Teaching Programme on knowledge regarding the breast feeding among mothers of under five children.
5) To find out association between post test knowledge regarding the breast feeding among mothers of under five children with their selected demographic variables.

Operational Definition

1) Effectiveness: It is extent to which the knowledge of mothers of under five children improved with regard breast feeding after the implementation of Structured Teaching Programme as evidence by difference in the pre-test and post test score.
2) Structured Teaching Programme: It refers to systematically organized instruction and discussion to impart Knowledge regarding the breast feeding among mothers of under five children
3) **Knowledge:** It refers to correct response of staff nurses to the question regarding knowledge of the breast feeding among mothers of under five children
4) **Breastfeeding:** It refers to the right act of giving breast milk by the mother to the new born baby till one year and so on which includes the position, time and hygiene in the postnatal period.
5) **Mothers of under five children:** It refers to those mothers who are having under-five children.

Hypothesis.

Research hypothesis have been formulated according to the objectives and review of literature
H1: There will be significant difference between mean pre-test and post-test knowledge scores of mothers of under five children attending Structured Teaching Programme on breast feeding
H2: There will be association between the post-test knowledge score of mothers of under five children regarding breast feeding with their selected socio-demographic variables.

Assumptions

It refers to beliefs that are held to be true, but not necessarily been proven that statement.
The assumptions made for this study were:
1) mothers will be cooperative with the researcher and would be willing to express their knowledge regarding breast feeding.
2) The structured questionnaire prepared for data collection will be sufficient enough to assess the actual knowledge level of mothers regarding breast feeding.
3) The response of mothers to the questionnaire will represent their knowledge on breast feeding.

Delimitations

1) The study will only be limited to mothers of under five children in the selected areas
2) who are the present at the time of data collection.

Therefore, the investigator felt that there is a need to enhance the knowledge among mothers of under five children regarding breast feeding, so that the mothers of under five children should have adequate knowledge about feeding.

MATERIALS AND METHODS

The research approach for the present study is evaluative approach and the research design was one group pre test and post test design which belongs to pre- experimental research design. Purposive Non random sampling technique was used to select the areas of safidon. The sample size was of 50 mothers of under five children. Tool consists of two sections: Section A: Consists of socio demographic data of the mothers. It consists of 7 items regarding the demographic information of the subjects such as age, gender, religion, experience in year and source of information. Section B: The tool consists of 30 items of knowledge regarding breast feeding. The items were closed ended questions especially of multiple-choice questions. The total score was 30. Each correct response of the question carried out with one mark. The pilot study revealed the feasibility of the main study. Reliability of the tool was calculated by the test-retest method. By using Karl Pearson's co-efficient of co relation method "r" value is obtained. [r^1=0.91. It shows that the tool was highly reliable for the final study. Data were collected by using structured knowledge questionnaire schedule through multiple choice questions and administer structured teaching programme to the group and after a gap of seven days post test was conducted with the same tool. Wherever needed, questions were explaining in simple terms for staff nurses. Analysis of the data was done using descriptive statistics as frequency, percentage, mean, standard deviation and inferential statistics as paired' test and Chi- square test.

RESULTS

The analysis of the data has been arranged and organized and presented under the following section.

Table – 1: Frequency and Percentage Distribution of Mothers of under Five Children by their Socio Demographic Variables. N=50

Section -1 Demographic variables Performa		Frequency (n)	Percentage (%)
Age (in years)	20-25	18	36%
	25-30	14	28%
	30-35	11	22%
	35-40	07	14%
Father's education	10^{th}	06	12%
	12^{th}	19	38%
	Graduate and above	22	44%
	No formal education	03	06%
Mother's education	10^{th}	14	28%
	12^{th}	18	36%
	Graduate and above	08	16%
	No formal education	10	20%
Type of residential area	Urban	17	34%
	Rural	33	66%
	Joint	25	50%

Type of family	Nuclear	24	48%
	Extended	01	02%
Source of information	Media	16	32%
	Books	30	60%
	Relatives	02	04%
	Friends	02	04%

According to the age, 36% (18) of respondents are in the age group of 20-25 years, 28% (14) of respondents are in the age group of 25-30 years, 22% (11) of respondents are in the age group of 30-35 years and 14% (07) of respondents are in the age group of 35-40 years.

According to the father's educational status of student nurses, 12% (06) fathers are educated till 10^{th} class, 38% (19) fathers are educated till 12^{th} class, 44% (22) fathers are graduate and above and 6% (3) have no formal education.

According to the mother's educational status of student nurses, 28% (14) mothers are educated till 10^{th} class, 36% (18) mothers are educated till 12^{th} class, 16% (08) mothers are graduate and above and 20% (10) have no formal education.

According to the type of residential area, 34% (17) of respondents are from urban area and 66% (33) of respondents are from rural area.

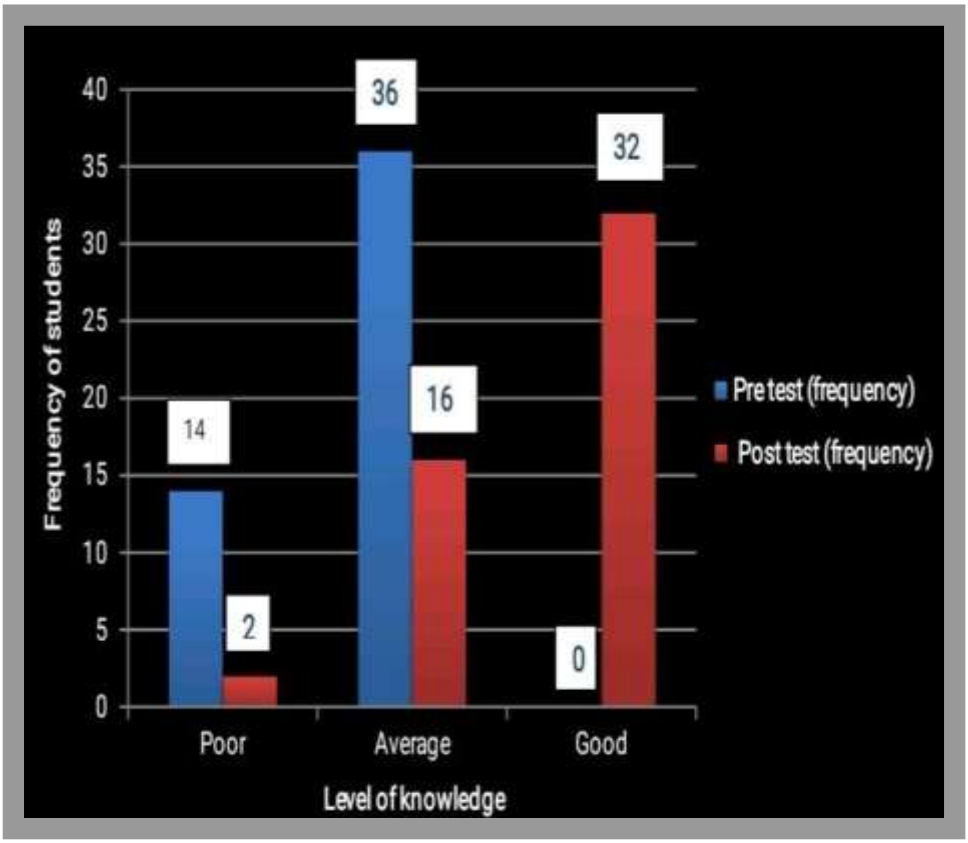
According to the type of family, 50% (25) of respondents belongs to joint family, 48% (24) of respondents belongs to nuclear family and 2% (01) of respondent belongs to extended type of family.

According to the source of information, 32% (16) of respondents got information through media, 60% (30) of respondents got information through books, 4% (02) of respondents got information through relatives and 4% (02) of respondents got information through friends.

TABLE – 2 Frequency and percentage distribution of level of knowledge of mothers of under five children regarding breast feeding N=50

S. No	Level of knowledge	Pre-test		Post- test	
		Frequency	Percentage%	Frequency	Percentage%
1.	Poor	14	28%	2	4%
2.	Average	36	72%	16	32%
3.	Good	0	0	32	64%

Tables 2 describe the percentage distribution of scores reveals that in with regard to pre-test, majority of mothers of under five children i.e., 72% (36) had average knowledge, 28% (14) of them had poor knowledge and none of the students had good knowledge regarding breast feeding. With regard to post-test, majority of mothers of under five children i.e., 64% (32) had good knowledge, 32% (16) of them had average knowledge and 4% (2) of them had poor knowledge regarding breast feeding.



Pre-test and Post-test frequency distribution of level of knowledge regarding brest feeding

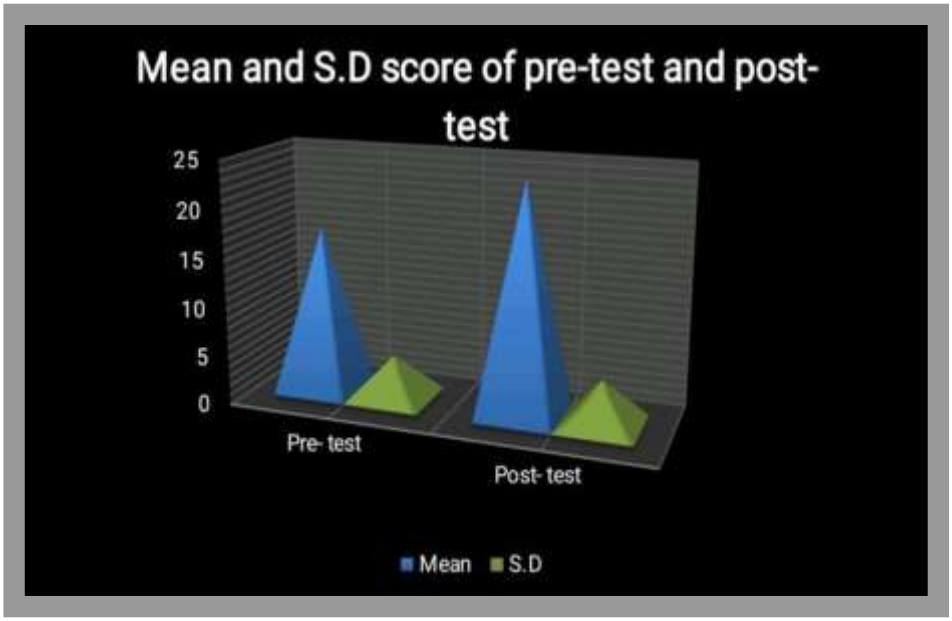
TABLE-3 Mean and standard deviation of pre test and post test knowledge scores in specific areas related to breast feeding

N=50

Area	Maximum scores	Pre- test scores		Post- test scores	
		Mean	S.D	Mean	S.D
Introduction and general information	10	7.9	0.85	8.88	1.08
Position and technique of breast feeding	05	3.56	0.82	4.48	0.70
Contradictions of breast feeding	13	5.34	2.02	8.9	2.23
Problems and complication	02	0.6	0.77	1.56	0.63
Overall	30	17.36	4.46	23.82	4.64

Table 3 describes that the Mean and Standard Deviation of pre test and post test knowledge scores in specific areas breast feeding. It clearly describes that the overall knowledge Mean score in pre test was increased from 17.36±4.46 to 23.82 ±4.64 in post test. This depicts that

Structured Teaching Programme was effective in improving the Overall knowledge of smothers of under five children nurses regarding breast feeding.



Mean and SD of pre-test and post-test.

TABLE -4 Comparison of pre test and post test scores regarding CPR by paired' test

N=50

Specific areas of CPR	Mean difference	Standard deviation difference	Standard error of mean difference	Paired 't' test
Overall knowledge	6.46	0.18	0.91	15.42
Introduction and general information	0.98	0.23	0.21	7.22
Position and technique of breast feeding	0.92	-0.12	0.15	6.74
Contradictions of breast feeding	3.56	0.21	0.42	11.59
Problems and complication	0.96	-0.14	0.14	8.71

Table 4 describes that Mean difference was 06.46 (SE D=0.91) with paired 't' value of 15.42. Thus, it was revealed that the post test mean score was significantly higher than the pre test Mean score. The Table value of paired 't' test at 29 degrees of freedom and at 0.05 level of significance was 2.045. Since the calculated value was higher than the Table value, the research hypothesis H_1 was accepted. Hence, there was a significant difference between the pre test and post test knowledge scores of the mothers of under five children on breast feeding.

TABLE -5 Association between socio demographic variables of mothers of under five children with their post test knowledge scores regarding breast feeding

S. No	Variable	Calculated χ^2 value	table value	df	Association
1	Age	0.13	3.84	1	NS
2	Father education	0.69	3.84	1	NS
3	Mothers education	0.98	3.84	1	NS
4	Type of residential areas	1.69	3.84	1	NS
5	Type of family	2.45	3.84	1	NS
6	Source of Information regarding breast feeding	1.83	3.84	1	NS

Table 5 describes that the calculated the Chi-square (χ^2) values computed for post-test knowledge scores on breast feeding with Age (0.13), father education (0.69), mothers education (0.98), type of residential areas (1.69), type of family (2.45) and Source of Information regarding CPR (1.83) are found to be less than the table values at 5% level of significance which implies that there is no significant relationship between post-test knowledge scores of mothers of under five children with regard to breast feeding and their Demographic variables. Hence the research hypothesis H_2 was rejected.

DISSCUSSION

The pre test Mean score of mothers of under five children was 17.36 (SD=4.46) and post test mean score increased to 23.82 (SD=4.64). The comparison mean difference in the present study was 06.46 (SE of mean D = 1.91) with paired‘t’ value of 15.45. Table value of‘t’ at 0.05 level of significance and 29 degrees of freedom is 2.045. As the calculated value was more than the table value, it was clearly found that the Structured Teaching Programme was effective in improving the knowledge of mother of under five children regarding breast feeding.

Association was done between demographic variables and post test level of knowledge score of adolescents by using chi-square (χ^2) test. The calculated chi square values were less than the table values indicated that there was no significant association between the demographic variables such as age, fathers’ education, mothers’ education, type of residential areas, type of family sources of information regarding breast feeding with post test knowledge scores of mothers of under five children. Hence the hypothesis (H2) has been rejected.

CONCLUSION

The pre test Mean score of mothers of under five children was 17.36 (SD=4.46) and post test mean score increased to 23.82 (SD=4.64). The comparison mean difference in the present study was 06.46 (SE of mean D = 1.91) with paired ‘t’ value of 15.45. Table value of‘t’ at 0.05 level of significance and 29 degrees of freedom is 2.045. As the calculated value was more than the table value, it was clearly found that the Structured Teaching Programme was effective in improving the knowledge of mother of under five children regarding breast

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