



A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ON KNOWLEDGE REGARDING HUMAN MILK BANKING AMONG 3RD YEAR GNM STUDENTS IN SELECTED SCHOOL.

Nursing

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ABSTRACT

The title of the study was a pre-experimental study to assess the effectiveness of planned teaching on knowledge regarding Human Milk Banking among 3rd year GNM students in selected school. **OBJECTIVES:** To evaluate the effectiveness of planned teaching on knowledge regarding Human Milk Banking among 3rd year GNM students in selected school. **METHODOLOGY:** The researcher conducted pilot study and used quantitative research approach with pre-experimental one group pre-test post-test design in selected school. Among 10 samples who gave consent for the study and were selected through non probability convenient sampling technique. The tool was validated by experts was used to assess the knowledge of students. The researcher found the study feasible and reliable. Main study was conducted in a similar other than the one used in pilot study. After acquiring the necessary consent, the main study was conducted among 100 subjects of selected school. **RESULT:** The findings of the study included, the analysis and interpretation of data collected from the subjects in the selected school. In this study, out of 100 subjects most of the subjects, 48 (48%) of subjects were in the age group of 18-20 years. 71 (71%) subjects were female. 62 (62%) subjects were urban area of residence. 58 (58%) subjects had previous knowledge regarding Human Milk Banking. 43 (43%) of them had information from books. In pre-test 18 (18%) subjects had poor level of knowledge score regarding the Human Milk Banking, while 70 (70%) had satisfactory knowledge, whereas 12 (12%) subjects had good level of knowledge score and none of the subjects had excellent knowledge about it. While in post-test 4 (4%) subjects had satisfactory level of knowledge score regarding the Human Milk Banking, while 33 (33%) had good knowledge and 63 (63%) subjects had excellent level of knowledge score. **CONCLUSION:** The analysis of the study revealed that there was a significant improvement in the knowledge of subjects regarding Human Milk Banking. The planned teaching proved to be effective in improving the knowledge of students in selected school.

KEYWORDS

Effectiveness, Planned Teaching, Human Milk Banking, Pasteurized Donor Breast Milk.

INTRODUCTION:

“There is no substitute for mother's milk”.

Health is wealth. For the good health one needs good nutrition. Mother's milk is the best nutrition for baby. Breast Milk is the safest and protective food for infants and also the best choice to feed premature and ill babies. Superiority of human milk is due to its higher nutritive and protective value. It provides total nutrient requirement for the first six months of life. It also prevents malnutrition and allows the child to develop fully. But when there is not enough mothers 'milk available due to some reasons like mother has insufficient milk glands, has had past breast surgery or is taking medication (e.g. chemotherapy for cancer) and has an infection that could spread to her baby through breast feeding. For these babies an alternative must be sought.¹ When the infant's mother cannot supply her breast milk to her baby, milk from other mothers may be used as an alternative. WHO and UNICEF joint statement in 1979 indicated where it is not possible for the biological mother to breastfeed, the first alternative, if available, should be the use of human breast milk from other sources, Human milk banks should be made available in appropriate situations. The statement was endorsed by World Health Assembly 33.32 1980. Milk banking includes pooling and storing breast milk collected from different donors for future use. A human milk bank is a physical unit where collected human milk is screened, processed, stored and distributed upon the doctor's prescription for its use. Banking of donated breast milk has been in existence for many years in developed countries and has been prescribed to aid in the treatment of many ailments in the neonatal period.²

The World Health Organization (WHO), the United Nations International Children's Emergency Fund (UNICEF), and the American Academy of Pediatrics state that the use of donor human milk should be the first alternative when maternal milk was not available, particularly for preterm neonates.³ Human milk bank (HMB) primarily started to provide donor human milk to high-risk new-born's admitted in the neonatal unit.⁴

MATERIAL AND METHODS

PROBLEM STATEMENT

“A pre-experimental study to assess the effectiveness of planned teaching on knowledge regarding Human Milk Banking among 3rd year GNM students in selected school”.

OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVE

1. To evaluate the effectiveness of planned teaching on knowledge

regarding Human Milk Banking among 3rd year GNM students in selected school.

OTHER OBJECTIVES

1. To assess the existing knowledge regarding Human Milk Banking among 3rd year GNM students in selected school.
2. To assess effectiveness of planned teaching on knowledge regarding Human Milk Banking among 3rd year GNM students.
3. To determine the association between knowledge of 3rd year GNM students regarding Human Milk Banking with their demographic variables.

HYPOTHESIS

H₀: There is no significant difference between pre-test and post-test knowledge score regarding Human Milk Banking among 3rd year GNM students which is measure at $p < 0.05$ level of significance.

H₁: There is significant difference between pre-test and post-test knowledge score regarding Human Milk Banking among 3rd year GNM students which is measure at $p < 0.05$ level of significance.

H₀: There is no significant association between level of knowledge score regarding Human Milk Banking among 3rd year GNM students with their selected demographic variable which is measure at $p < 0.05$ level of significance.

H₁: There is significant association between level of knowledge score regarding Human Milk Banking among 3rd year GNM students with their selected demographic variable which is measure at $p < 0.05$ level of significance.

RESEARCH METHODOLOGY

A pre-experimental One Group Pre-Test and Post-Test research design with Quantitative Approach was used to assess the knowledge regarding Human Milk Banking. Sample of 100 students in selected school were selected for conducting study. Non-Probability Convenient Sampling technique was used for selecting the sample. The study was conducted in month of February 2021 among students in selected school. A structured knowledge questionnaire was used for assessing knowledge regarding Human Milk Banking.

ETHICAL CONSIDERATION

Institutional Ethical Committee clearance was obtained. Permission was obtained to conduct the study in the selected school. Participants were informed about the study and written consent was obtained

from the individual participants and all the safety measures of COVID-19 ruled by government of India were followed while conducting study.

VALIDITY:

To obtain the content validity of the tool, the prepared tool with the synopsis, planned teaching on Human Milk Banking, evaluators response sheet and content validity certificate were submitted to 13 experts in the field of Obstetrics and Gynecological nursing.

RELIABILITY:

In this study the reliability was established by using Split half method. So, in split half method the KR-20 formula is applied to find out the reliability coefficient 'r'. The reliability for structured knowledge questionnaire was $r = 0.72$. It is reliable to the instrument.

METHOD OF DATA COLLECTION:

The data gathering process began from 6th February 2021 to 15th February 2021. The investigator visited the selected school and obtains the necessary permission from the concerned authority. The investigator personally approached each subject and explained the purpose of the study and explains how it will be beneficial for them. The investigator confirmed their willingness to participate in the study. After the pre-test and planned teaching was initiated by the investigator. Post-test was administered with same questionnaire on the 7th day.

RESULT

Organization Of Findings

The analysis and interpretation of the observations are given in the following sections:

Section A: Distribution of subjects in relation to their demographic variables.

Section B: Assessment of level of knowledge regarding Human Milk Banking among subjects in selected school.

Section C: Evaluation of effectiveness of planned teaching on knowledge regarding Human Milk Banking among subjects in selected school.

Section D: Association of level of knowledge score in relation with their selected demographic variables.

Section A: Distribution of subjects in relation to demographic variables.

Table 1: Distribution of subjects in relation to their demographic variables
n = 100

Demographic Variables	Frequency (f)	Percentage (%)
Age in years		
18-20 years	48	48%
21-23 years	44	44%
24-26 years	6	6%
Above 26 years	2	2%
Gender		
Male	29	29%
Female	71	71%
Area of Residence		
Urban	62	62%
Rural	38	38%
Previous knowledge regarding Human Milk Banking		
Yes	58	58%
No	42	42%
Sources of information		
Family	6	6%
Friends	5	5%
Media	4	4%
Books	43	43%

Section B: Assessment of level of knowledge regarding Human Milk Banking among subjects in selected school.

In pre-test, minimum knowledge score in pre-test was 4 and maximum knowledge score in pre-test was 20. Mean knowledge score in pre-test was 10.64 ± 3.30 .

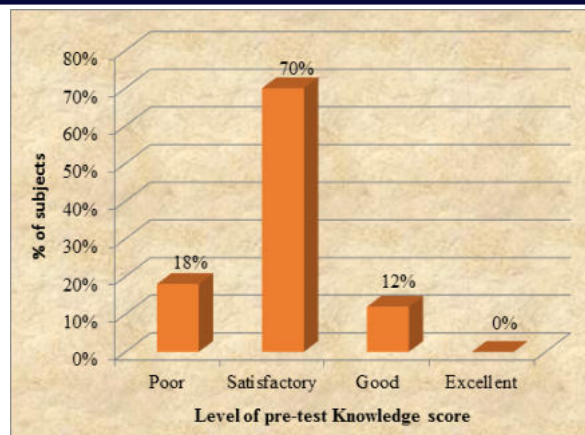


Figure 8:- Assessment of level of pre-test knowledge score regarding Human Milk Banking among subjects in selected school.

In post-test, minimum knowledge score in post-test was 14 and maximum knowledge score in post-test was 28. Mean knowledge score in post-test was 22.91 ± 3.68 .

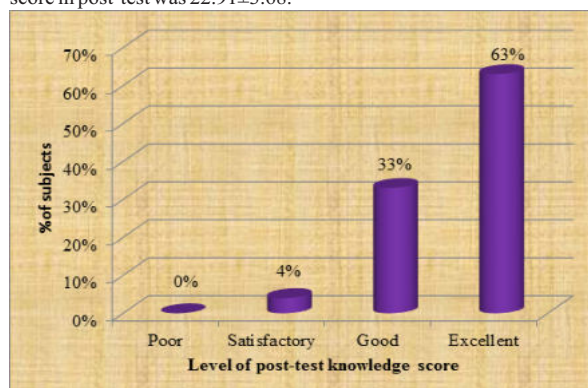


Figure 2:- Assessment of level of post-test knowledge score regarding Human Milk Banking among subjects in selected school.

Section C: Evaluation of effectiveness of planned teaching on knowledge regarding Human Milk Banking among subjects in selected school.

Table 2 : Significance of difference between knowledge scores in pre-test and post-test of subjects.
n = 100

	Overall	Mean	SD	Mean Difference	t-value	p-value
Pre-Test		10.64	3.30	12.27	24.45	p=0.0001 S, p<0.05
Post-Test		22.91	3.68			

The above table shows that in comparison of pre-test and post-test knowledge scores of subjects regarding Human Milk Banking. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The calculated 't' value was 24.45 whereas the tabulated 't' value was 2.06. It shows that calculated 't' value was much higher than the tabulated 't' value at 5% level of significance for overall knowledge score of subjects which is statistically acceptable level of significance. Hence it is statistically interpreted that the Planned Teaching on knowledge regarding Human Milk Banking among subjects was effective. Thus, the H1 is accepted.

Section D: Association of level of knowledge score in relation with their selected demographic variables.

The association of knowledge score with area of residence of subjects in selected school. The tabulated ' χ^2 ' values was 5.99(df=2) which is much less than the calculated ' χ^2 ' i.e., 9.14 at 5% level of significance. Also, the calculated ' p '=0.010 which was much less than the acceptable level of significance i.e., ' p '=0.05. Hence it is interpreted that area of residence of subjects was statistically associated with their post-test knowledge score.

CONCLUSION

After the detailed analysis, this study leads to the following conclusion Planned teaching on Human Milk Banking was found to be effective in

improving the knowledge of subjects. Subjects had a significant gain in knowledge regarding the Human Milk Banking. An association was found between area of residence with knowledge score. Rests of the demographic variables did not show any association with the knowledge score. Hence, based on the above findings, it was concluded undoubtedly that the written prepared material by the investigator in the form of planned teaching helped the subjects to improve their knowledge regarding Human Milk Banking.

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