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TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HUMAN BREAST MILK BANKING AMONG ANTENATAL MOTHERS

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Abstract: **Aim:** To assess the effectiveness of structured teaching programme on knowledge regarding human breast milk banking among antenatal mothers from selected hospitals, Pune.

Objectives: a). To assess the knowledge regarding Human Breast Milk Banking among antenatal mothers from selected hospital before and after interventions. b). To find the association between the knowledge with selected demographic variables.

Method: Pre-experimental non- randomized, one-group pre-test- post-test design, purposive sampling technique was used with sample size of 100 ANC mothers.

Result: The mean pre-test score 5.7 increased to 6.8 in post-test of ANC mothers.

Conclusion: It is evident that the knowledge among antenatal mothers regarding human breast milk banking improved significantly after structured teaching program.

Key Words: - Knowledge, Antenatal Mothers, Human Milk Banking, Structured Teaching Programme.

I. INTRODUCTION

The first human milk bank was found in 1909 in Vienna, Austria. It is universally accepted that breast milk is the optimum exclusive source of nutrition for the first six month of life, and may remain part of the healthy infant diet for the next two year of life and beyond. Milk donation is an act of unselfishness.[1] Human milk is unquestionably the best source of nutrition for neonates or infants by the virtue of uniqueness of its biological composition.

Despite advances in infant formulas, human breast milk provides a bioactive matrix of benefits that cannot be replicated by any other source of nutrition. When mothers own milk is unavailable for hospalized new born, sick, pasteurized human donor should be made available as an alternative choice for feeding available as an alternative other than commercial formula. The benefits of human breast milk include optimum growth, immune function and development at minimal cost to the family.[2]

HBMB is an essential component of a breastfeeding- friendly health system giving pre-term, low birth-weight and other vulnerable infants access to the numerous benefits when needed most. [9] Milk banks receive milk from donors, process it, and store it until used.

HBM donation helps in bridging between helpful to needed one. The considered essential component for the new born is Mothers Milk. It provides total nutrition requirement for the first six months of life.[3] Milk banks generally follow standardized procedures for the collection and handling of donated milk.[4] Most of the breast milk is donated by the mother or women whose supply of the breast milk is large enough and also could satisfy their own infant's needs. This study deals with assessing the effectiveness of structured teaching programme on knowledge regarding human breast milk banking among ANC mothers.

II. MATERIAL AND METHODS

The researcher has adopted Pre-experimental non- randomized, one-group pre-test, post-test design. Purposive sampling technique was used to select the experimental group with the sample size of 100 ANC mothers who were willing to participate in the study. Prior pre-test was conducted with the help of prepared tool then the structured health teaching was given and post-test was conducted after the intervention.

The tool consisted of two sections. Section I: Demographic Profile, consisted Personal profile. Which had 7 items of the sample's information such as, age, education, type of family, occupation, monthly family income, no. of children, area of residence, any previous information about Human breast milk donation. Section II: Knowledge On Human Breast Milk Banking, consisted 10 MCQ and 5 checklist type questions. The content validity was determined by 11 experts from different specialties. Reliability was assessed using test-retest method. Pearson's correlation coefficient of the tool was found to be r = 0.87. The main study was conducted in Dr. D. Y. Patil Hospital and Research Centre from 01/04/2022 till 30/04/2022. The data was analyzed using descriptive and inferential statistics.

III. RESULT

Description of antenatal mothers based on their personal characteristics in terms of frequency and percentage is like 33% of the antenatal mothers had age 18-23 years, 27% of them had age 24-30 years, 21% of them had age 31-36 years and 19% of them had age 37-42 years. 49% of them had primary/secondary education, 30% of them had higher secondary education, 19% of them had graduation and 2% of them had post-graduation and above. 51% of them had nuclear family, 35% of them had joint family, 12% of them had extended families and 2% of them had single parent family. 68% of them were housewives, 20% of them had service, 1% of them were business women and 11% of them were self-employed. 29% of them had monthly family income Rs. 15001-25000, 39% of them had monthly family income Rs.25001-35000 and 32% of them had monthly family income above Rs. 35000. 27% of them did not had children, 45% of them had one child, 24% of them had two children and 4% of them had three or more children. 1% of them were from urban area, 4% of them were from suburban area and 95% of them were from rural area. 16% of them had previous information about Human breast milk donation from friends/relatives, 22% of them had previous information from doctors, nurses, ASHA workers, 22% of them had previous information from Whats App, Facebook, You Tube and 40% of them did not have previous information about Human breast milk donation.

Demographic variable	Freq.	%
Age		
18-23 years	4	40
24-30 years	4	40
31-36 years	1	10
37-42 years	1	10
Education		
Primary/ Secondary Education	4	40
Higher Secondary Education / Diploma Holder	3	30
Graduate	3	30
Type of Family		
Nuclear	5	50
Joint	5	50
Occupation		
Housewife	5	50
Service	2	20
Business women	1	10
Self-employed	2	20
Monthly Family Income		
15001 to 25000	5	50
25001 to 35000	4	40
35001 & Above	1	10
No. of Children		
Zero	4	40
One	5	50
Two	1	10
Area of Residence		
Urban area	2	20
Suburban area	7	70
Rural area	1	10
Do you have previous information about Human breast milk donation		
Friends/ Relatives	1	10
Doctors, Nurses, ASHA workers	2	20
Whatsapp, Facebook, YouTube	2	20
None	5	50

Table I: Demographic data analysis

Analysis of data related to knowledge regarding Human Breast Milk Banking among antenatal mothers from selected hospitals before and after intervention is like in pre-test, 43% of the antenatal mothers had poor knowledge and 57% of them had average knowledge regarding Human Breast Milk Banking. In post-test, 29% of them had poor knowledge, 67% of them had average knowledge and 4% of them had good knowledge regarding Human Breast Milk Banking. This indicates that the knowledge among antenatal mothers improved remarkably after structured teaching program regarding Human Breast Milk Banking.

Knowledge	Pre-test		Post-test	
	Freq.	%	Freq.	%
Poor (score 0-5)	4	40	3	30
Average (score 6-10)	6	60	7	70
Good (score 11-15)	0	0	0	0

Table II: To assess the knowledge regarding human breast milk banking among antenatal mothers from selected hospitals before and after intervention

Researcher applied Paired t-test for the effectiveness of structured teaching programme on knowledge regarding human breast milk banking among antenatal mothers. Average knowledge score in pre-test was 5.7 which increased to 6.8 in post-test. T-value for this test was 7.3 with 99 degrees of freedom. Corresponding p-value was small (less than 0.05). Null hypothesis is been rejected. It is evident that the knowledge among antenatal mothers regarding human breast milk banking improved significantly after structured teaching program.

	Mean	SD	T	df	p-value
Pre-test	5.4	1.78	2.18	9	0.029
Post-test	6.7	1.57			

Table III: Paired t-test for the effectiveness of structured teaching programme on knowledge regarding human breast milk banking among antenatal mothers

The demographic variable "previous information about Human breast milk donation" was found to have significant association with the knowledge among the antenatal mothers regarding Human Breast Milk Banking.

IV. DISCUSSION

A study conducted by Philomena Fernandes, et all 2020, a quantitative research approach was adopted to assess the knowledge on Human Milk Banking in which structured questionnaire was used as a tool. The study was conducted in K.S. Hegde Charitable Hospital, descriptive survey design was used. The findings revealed that 52% of mothers had good knowledge and remaining mothers had an average knowledge. It was found that there was no significant association between knowledge of antenatal mothers with selected demographic variables. [5] Similarly in the current study the knowledge on HBMB among antenatal mothers was assesses. A pre-experimental non- randomized, one-group pre-test, post-test design using purposive sampling technique to select the experimental group on 100 antenatal mothers was adopted. The post-test revealed that 67% had average, 4% of them had good and rest had poor knowledge. Another similar descriptive study conducted by Dr. Parmees Kaur et. all. Purposive sampling technique was used among 60 mothers. It was found 48% had average knowledge, 40% had poor knowledge and 12% had good knowledge.[6] Even in the current study a larger sample had average and poor knowledge among ANC mothers but the post-test score was improved. Hence it is significant that structured teaching program was effective in improving the knowledge among antenatal mothers regarding human breast milk banking.

V. IMPLICATION OF THE STUDY

In Nursing Practice the current research tool could be used to assess the knowledge regarding HBMB among the antenatal, postnatal mothers and even among the spouses/ relatives. This data could be used by the nurses as well as the front line health care workers in order to promote and improve HBMB. In Nursing Education nursing students can be taught regarding HBMB. In Nursing Research replication of the study could be highly beneficial, various designs could be adopted and comparative studies could be conducted to increase the benefits of the participants. This research could be conducted in different settings.

VI. RECOMMENDATIONS

The preferred nutrition for the new born is his/her own mothers breast milk and if it is not available or limited, pasteurized human donor breast milk is recommended.[7] So good feeding practices is important for health and nutritional status of children which also helps in mental and physical development among them.[8] Hence it important to properly educate the ANC mothers.

This study may be replicated using a larger population of sample and in different settings.

VII. CONCLUSION

The main interest of this study was to evaluate the effect of structured teaching programme among ANC mothers. Based on data collected and statistical analysis, this study concludes that the structured teaching programme was significant in improving the knowledge.

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