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Effectiveness of an information booklet on knowledge regarding breastfeeding among mothers of under two-years children

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ABSTRACT

Background: The basic 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. But 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.

Methods: A quantitative evaluative research approach and Quasi experimental one group pre-test post-test design was used. By using purposive sampling technique total 65 mothers of under two years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow, were selected to assess the effectiveness of an information booklet on knowledge regarding breastfeeding. Written permission was obtained from the authorities of Vivekananda Polyclinic and Institute of Medical Sciences, Lucknow, where the study was conducted.

Results: In pre-test the majority of mothers, 50.80% had moderate knowledge, 40.00% of mothers had inadequate knowledge whereas 9.20% of mothers had adequate knowledge. In post-test majority 92.30% mothers had adequate knowledge, 7.70% mothers had moderate knowledge whereas none of the mothers had inadequate knowledge.

Conclusions: The study concluded that after the distribution of information booklet on knowledge regarding breastfeeding mothers of under two-years children have gained their knowledge.

Keywords: Knowledge, Information booklet, Breastfeeding

INTRODUCTION

The basic 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. But 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. United Nations Children's Fund (UNICEF) stated that every year one million infants die

and millions of others are impaired, because they are not adequately breastfed. Every day between 3000 to 4000 infants die from diarrhea and acute respiratory infections because the ability to feed them adequately has been taken away from their mothers.²

Any damage caused by nutritional deficiencies in first 2 years of life are detrimental to child's growth and development and could lead to impaired cognitive development, compromised educational achievement and low economic productivity. Breastfeeding confers both

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short-term and long-term benefits both to the child and the mother including child protection against a variety of acute and chronic disorders. WHO/UNICEF global strategy on infant and young child feeding practices aims to promote optimal breastfeeding and complementary feeding practices through baby friendly hospital initiative and international breastfeeding codes.³

Breast milk has nutritional, immunological, behavioural and economic benefits and helps to build mother infant bonding. Breastfed children have lower rates of childhood cancers, infections, asthma, allergies, childhood diabetes, gastrointestinal illnesses and infections that can damage their hearing. The major causes of death among under five children in India is neonatal sepsis, diarrhoea and pneumonia and breast milk is protective against all the three diseases. Breastfeeding benefits is not just restricted to child, it protects the mother who has breastfed from developing ovarian and premenopausal breast cancers and it also reduces the risk of postpartum bleeding and osteoporosis.⁴

More than 15% of 24 lacs child deaths could be avoided in India by optimal breastfeeding practices but very few women in India have access to counselling services to infant and young children feeding. Despite the breastfeeding knowledge benefits its prevalence and duration among general population in many countries are still lower than the international recommendations of six month of exclusive breastfeeding. The prevalence of exclusive breastfeeding of six months duration is 46.4% and the early initiation of breastfeeding in India is less than 41%, which are far from the desired level and interestingly breastfeeding practices vary among different regions and communities. In India it is common practice amongst mothers to extract the initial breast milk which they think is watery and is harmful to the baby.⁵

Positive parental attitudes towards infant feeding are an important component in child nutritional health. The Special Supplemental Women, Infants and Children (WIC) Program have lower breastfeeding rates and attitudes that do not contribute towards healthy infant feeding in spite of breastfeeding and nutrition education programs targeting WIC participants.⁶

Weaning should be started after the age of 6 months and should contain energy rich semi-solid food. Malnutrition makes a child susceptible to infections and delays recovery, thus increasing mortality and morbidity. Every time an innocent child suffers the curse of malnutrition; the responsibility goes to the mother, the family and to the community due to their faulty or no knowledge regarding the harmful effects of pre-lacteal feeding, benefits of exclusive breastfeeding and initiation of proper weaning at the correct. Breastfeeding creates a special bonding experience between the mother and child, which is unparalleled and it provides a special nutrition to the infant. Breast milk is a complete food for the infant. The nutritional profile of breast milk in terms of calories,

vitamins and minerals is the best for the infant as it has the perfect proportion of them.¹

Exclusive breastfeeding can be defined as a practice whereby the infants receive only breast milk and not even water, other liquids, tea, herbal preparations or food during the first six months of life, with the exception of vitamins, mineral supplements or medicines. The major advantage of exclusive breastfeeding till six months includes reduced morbidity due to gastrointestinal infection. Perhaps most importantly; breastfeeding has been shown to be associated with lower child mortality.⁴

India is a vast country, so breastfeeding practices vary accordingly in different regions and communities across the nation. The importance of breastfeeding to infant health cannot be overemphasized. The UNICEF has estimated that exclusive breastfeeding in the first 6 months of life can reduce under-five mortality rates in developing countries by 13%. Breastfeeding is mutually beneficial to both mother as well as child and is considered the best source of nutrition for an infant. WHO recommends infant be exclusively breastfed for the first 6 months starting within the 1st hour of life, followed by breastfeeding along with complementary foods for up to 2 years of age or beyond. The maternal and neonatal benefits of breastfeeding are extensively recorded and exclusive breastfeeding for the first six months of a child's life is recommended as the single largest potential intervention to prevent child mortality. To this end, the World Health Assembly has set a global nutrition target, that in 2025 at least 50% of infants should be exclusively breastfeeding at six months of age.9

Developed countries keep on witnessing low breastfeeding rates. Globally, only 38% of infants are exclusively breastfed at six months of age. Although breastfeeding is a natural, physiological process, it is also a learned behaviour. Maternal knowledge about breastfeeding and breastfeeding attitudes are associated with longer duration of breastfeeding and intent. Mothers who are positively predisposed to breastfeeding seem to maintain breastfeeding longer, regardless of whether they are exclusively breastfeeding.

Also, mothers who find that it is more practical, healthy and less expensive to breastfeed, choose formula less often compared to mothers that regard breastfeeding to be troublesome and embarrassing. The predominance of formula feeding may be due in part to a lack of knowledge about the benefits of breastfeeding and the need for providing women with more information about the benefits of breastfeeding has been identified. These modifiable factors associated with increased breastfeeding, i.e.; knowledge and self-efficacy may be addressed through antenatal breastfeeding education.⁵

More than 2.4 million child deaths occur in India each year and two thirds of these deaths are related to inappropriate infant feeding practices. According to NFHS 3 survey, it

showed that only 23.4% of the children less than three years were given breast milk within one hour of delivery. Only 46.3% of children in the age group of five years were exclusively breastfed and 56.7% practiced it more than six months.¹⁰

Every year first week of August is celebrated as world breastfeeding week throughout the world, emphasizing on the importance of breastfeeding benefits and the techniques of breastfeeding. Breastfeeding is one of the most cost effective and cost benefit ways of reducing infant mortality and improve the child health. The solution, according to WHO, is simple as it is natural. Early initiation of breastfeeding, it says within an hour after birth should bring the infant mortality rate down by 22%. Breastfeeding alone contributes to 11.6% reduction of infant mortality rate if coverage of population is 99 presents through one to one group counselling.

In India, breastfeeding in rural areas appears to be shaped by the beliefs of a community, which are further influenced by social, cultural and educational factors. Successful breastfeeding depends not only on mother's education but also on support and motivation from family members and health care professionals. In India, breastfeeding is almost universal. However, the rates of early initiation, exclusive breastfeeding and timing of complimentary feeds are far from desirable.

The WHO has identified several leading factors that may contribute to low rates of exclusive breastfeeding; including societal beliefs favouring mixed feeding, hospital practices that are not supportive of breastfeeding and lack of knowledge among women and their partners. Furthermore, factors related to continued breastfeeding can be categorized into (a) socio-demographic factors; (b) biomedical factors; and (c) psychosocial factors such as breastfeeding attitude and self-efficacy.

The psycho-social factors are especially important to clinical practice, as they may be modified. Maternal breastfeeding self-efficacy is a significant psychometric factor that influences positively the breastfeeding rates and identifies high-risk mothers for discontinuing breastfeeding prematurely among varying maternal populations.¹²

METHODS

Study type

Quantitative evaluative research was applied.

Research design

To assess the effectiveness of an information booklet on knowledge regarding breastfeeding among mothers of under two-years children the investigator adopted 'Quasi experimental (one group pre-test post-test research design)'.

Table 1: Schematic representation of research design.

Group	Pre-test	Intervention	Post-test
Mothers of	O_1	X	O_2
under two			
years	D_1	D1	D_3
children			

where, O_1 - pre-test by using self-structured knowledge questionnaire regarding breastfeeding; X- information booklet regarding breastfeeding; O_2 - post-test by using the same self-structured knowledge questionnaire regarding breastfeeding.

Setting of the study

The study was conducted in Vivekananda Polyclinic and Institute of Medical sciences, Lucknow.

Population

The population for the present study comprises mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward.

Target population

In this study target population was the mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow.

Accessible population

In this study accessible population was the mothers of under two-years children admitted in selected wards i.e.; Pediatric and Maternity ward at V.P.I.M.S., Lucknow, who met the inclusion criteria.

Sample

The sample for the present study comprises mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow.

Sampling technique

In this present study, the samples were selected who were fulfilling the inclusion criteria by the use of check list. So, purposive sampling technique was adopted.

Sample size

The total sample size was 65.

Study period

Data was collected from on 15 January 2020 to 10 February 2020.

Criteria for sample selection

Inclusion criteria

In this present study inclusive criteria were- participants who or whose children were admitted in pediatric and maternity ward of V.P.I.M.S., Lucknow, participants who were having children of under two year of age and participants who were able to read and write Hindi or English language.

Exclusion criteria

In the present study exclusion criteria were- participants who were not interested to participate in this present study, participants who were dropping out during post-test and mother's health condition did not allow for participation.

Development of tools

Based on the objective's demographic variables, self-structured knowledge questionnaire on breastfeeding and booklet was developed in English, translated into Hindi. It was pilot tested and revised before use to assess the effectiveness of an information booklet on knowledge regarding breastfeeding among mothers of under two-years children.

Description of tools

In this study the tool consisted of 2 parts-

Section I

Section I included socio-demographic data.

Section II

Section II included self-structured knowledge questionnaire

Development of information booklet

The information booklet was prepared based on the topic and objectives selected for the study.

The following steps were adapted for preparation of an information booklet- (a) development of the content; (b) preparation of an information booklet on knowledge regarding breastfeeding; and (c) establishment of content validity of an information booklet.

Reliability of tool

The tool was tested for reliability by administering the self-structured knowledge questionnaire among 10 mothers of under two-years children admitted in the maternity ward at Fatima Hospital, Lucknow. The reliability of the tool was established by using split half technique. The reliability of

the tool was found 0.9, which indicated that the tool was highly reliable.

Data collection procedure

Samples were selected by purposive sampling technique. The investigator administered self-structured knowledge questionnaire for pre-test and after the pre-test on the same day an information booklet on knowledge regarding breastfeeding was distributed to the mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow. Then on 3rd day of every pre-test; post-test was conducted by the same self-structured knowledge questionnaire to assess whether they gained knowledge or not from an information booklet regarding breastfeeding. If any question was not answered by the participant, investigator was insisting them to read again the question and answer that question. If they still have not answered the question then I considered it as zero mark.

Ethical approval

Written permission was taken from the research and ethical committee of Vivekananda College of Nursing, Lucknow. After obtaining formal permission from the hospital superintendent of Vivekananda Polyclinic and Institute of Medical sciences, samples were selected by purposive sampling technique. Written consent was obtained from the participants after explaining the purpose of the study and confidentiality was assured to all samples.

Analysis

The data analysis was based on objectives, research questions and analysis of the data was done by using descriptive and inferential statistics. Pre and post-test scores of knowledge were analyzed through the following technique.

Descriptive statistics

Frequency and percentage were used to analyze the demographic variables. Mean and standard deviation were used to analyze the knowledge regarding breastfeeding among mothers of under two-years children.

Inferential statistics

Chi-square test was used to find the association the pre-test knowledge scores with their selected socio demographic variables. Wilcoxon Signed Ranks test was used to assess the effectiveness of information booklet on knowledge regarding breastfeeding among mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow.

RESULTS

In the pre-test majority 40.00% had inadequate knowledge,

50.80% had moderate knowledge and 9.20% had adequate knowledge. In the post-test majority of the mothers, 92.30% had adequate knowledge and 7.70% had moderate knowledge. So, it was concluded that the information booklet regarding breastfeeding was effective.

Applied chi square (χ^2) test for significance. χ^2 value=1.953; df=2; p value=0.377; consider not significant. The data presented in Table 4 shows that the majority of mothers 25 (96.2%) transfer in adequate knowledge and 1 (3.80%) in moderate knowledge in posttest from 26 mothers of inadequate knowledge scores of

pre-tests. Majority of mothers 29 (87.90%) were shifted in adequate knowledge and 4 (12.10%) remain in moderate knowledge in post-test knowledge scores from 33 mothers of moderate knowledge scores of pre-tests. And 6 (100.00%) mothers of adequate knowledge in pre-test were remaining in post-test.

Here the Chi square value was 1.953 at the level of 0.377 which shows not significant. So, it was concluded that the majority of mothers were shifted in the moderate and adequate level of knowledge in post-test from the pre-test knowledge scores.

Table 2: Frequency and percentage distribution of mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow, according to their socio-demographic variables (N=65).

Socio-demographic variables		Frequency (F)	Percentage (%)
	20-24	11	16.9
Age (years)	25-29	41	63.1
Age (years)	30-34	12	18.5
	35 and above	1	1.5
	Primary	7	10.8
Education	Secondary	10	15.4
Education	Graduation/diploma	39	60.0
	Master degree	9	13.8
	Government job	3	4.6
Occupation	Private job	7	10.8
	Home maker	55	84.6
	Hindu	54	83.1
Religion	Muslim	11	16.9
Kengion	Christian	0	0.0
	Others: specify	0	0.0
	Nuclear	19	29.2
Type of family	Joint	44	67.7
	Extended	2	3.1
Residential area	Urban area	39	60.0
Residential area	Rural area	26	40.0
No. of under two-years	Single child	51	78.5
children	Two children or more	14	21.5
Previous knowledge	Yes	55	84.6
regarding breastfeeding	No	10	15.4
	Mass media	8	14.5
If yes, source of	Friends	7	12.7
Knowledge	Family	12	21.8
Knowicuge	Personal experience	3	5.5
	Health care provider	25	45.5
	Normal vaginal delivery	27	41.5
Mode of delivery	Assisted vaginal delivery	15	23.1
	LSCS	23	35.4
Family income per	Rs. 10,000-15,000	27	41.5
month	Rs. 15001-20,000	25	38.5
monui	Rs. 20001 and more	13	20.0

Table 3: Percentage distribution of pre-test and post-test knowledge scores (N=65).

Level of knowledge (%)	Pre-test score (%)	Post-test score (%)
Inadequate (<50)	40.0	0.0
Moderate (50-73)	50.8	7.7
Adequate (74)	9.2	92.3

Table 4: Percentage of improvement in knowledge scores among mothers of under two-years children after distribution of an information booklet on knowledge regarding breastfeeding.

Post-test	Pre-test	— Total		
	Inadequate	Moderate	Adequate	Total
Madawata	1	4	0	5
Moderate	3.80%	12.10%	0.00%	7.70%
Adequate	25	29	6	60
	96.20%	87.90%	100.0%	92.30%
Total	26	33	6	65
	100.0%	100.0%	100.0%	100.0%

Testing of hypothesis (H_1)

In order to determine the difference between the mean pretest and post-test knowledge scores, the following hypothesis H1 was formulated:

H1

There is a significant difference between the pre-test and post-test knowledge scores regarding breastfeeding among mothers of under two-years children admitted in selected wards i.e.; pediatric and maternity ward at V.P.I.M.S., Lucknow.

The data were analyzed by computing Wilcoxon signed ranks test for significance. The findings are presented in Table 5.

The presented data in Table 5 shows that the mean posttest knowledge scores of mothers was 25.72 and mean pretest knowledge score was 15.80. The z' value was computed i.e.; -7.007 and p value was <0.001.

This shows that the difference between pre-test and posttest scores of mothers was a true difference and not by chance. Hence, research hypothesis H1 was accepted.

Testing of hypothesis (H₂)

H2

There was a significant association between the pre-test knowledge scores with their selected socio-demographic variables.

The data was analyzed by Chi square. The findings are presented in Table 6. The data given in Table 6 shows that the Chi square test was used to find out the association between pre-test knowledge scores with their selected socio demographic variables. The finding of the chi-square test shows that there was an association between the pretest knowledge scores with their specific socio demographic variables like: age in years, education, occupation, family income per month regarding breastfeeding. Here the p value in each case was less than 0.05 (level of significance). Hence, research hypothesis $\rm H_2$ was accepted.

The findings of the Chi square test also showed that there was no association between the pre-test knowledge scores with their specific socio demographic variables like: religion, type of family, residential area, number of under two-years children, previous knowledge regarding breastfeeding, source of previous knowledge and mode of delivery.

Table 5: Effectiveness of information booklet on knowledge regarding breast feeding among mothers of under two years children.

Pre-test	N	Mean	Standard deviation	Mean difference	Z value	P value
	65	15.80	3.90	0.02	7.007	-0.001
Post-test	65	25.72	2.47	9.92	-7.007	< 0.001

Note: Z = -7.007 and p<0.05.

Table 6: Association between pre-test knowledge scores with their selected socio-demographic variable.

Socio-demographic variables		Pre-test					2	-	D	
		Inadequate Modera		derate	e Adequate		χ^2	Df	Ρ	
		F	%	F	%	F	%	value		value
Age (years)	20-24	3	11.5	7	21.2	1	16.7		6	*0.021
	25-29	15	57.7	23	69.7	3	50.0	14.062		
	30-34	8	30.8	3	9.1	1	16.7	14.863		
	35 and above	0	0.0	0	0.0	1	16.7			
	Primary	1	3.8	6	18.2	0	0.0			*** 0.40
T. 1.	Secondary	5	19.2	4	12.1	1	16.7	12 170		
Education	Graduation/diploma	19	73.1	18	54.5	2	33.3	13.170	6	*0.040
	Master degree	1	3.8	5	15.2	3	50.0	•		
	Government job	0	0.0	1	3.0	2	33.3		-	-
Occupation	Private job	2	7.7	3	9.1	2	33.3	17.341	4	*0.002
•	Home maker	24	92.30	29	87.9	2	33.3			
	Hindu	23	88.5	26	78.8	5	83.3		2	0.616
D	Muslim	3	11.5	7	21.2	1	16.7	0.968		
Religion	Christian	0	0.0	0	0.0	0	0.0			
	Others: specify	0	0.0	0	0.0	0	0.0			
	Nuclear	4	15.4	13	39.4	2	33.3	6.789	4	0.147
Type of family	Joint	22	84.6	18	54.5	4	66.7			
	Extended	0	0.0	2	6.1	0	0.0			
Davidan dalama	Urban area	12	46.2	22	66.7	5	83.3	4.049	2	0.132
Residential area	Rural area	14	53.8	11	33.3	1	16.7			
No. of under two-years	Single child	18	69.2	28	84.8	5	83.3	0.100	2	0.334
children	Two children or more	8	30.8	5	15.2	1	16.7	2.192		
Previous knowledge	Yes	21	80.8	28	84.8	6	100.0	1 200	_	0.500
regarding breastfeeding	No	5	19.2	5	15.2	0	0.0	1.388	2	
	Mass media	2	9.5	5	17.9	1	16.7			0.694
Te e	Friends	1	4.8	5	17.9	1	16.7		8	
If yes, source of	Family	7	33.3	4	14.3	1	16.7	5.581		
Knowledge	Personal experience	2	9.5	1	3.6	0	0.0			
	Health care provider	9	42.9	13	46.4	3	50.0			
Mode of delivery	Normal vaginal delivery	11	42.3	15	45.5	1	16.7		4	0.142
	Assisted vaginal delivery	7	26.9	8	24.2	0	0.0	6.886		
	LSCS	8	30.8	10	30.3	5	83.3			
Family income per	Rs. 10,000-15,000	11	42.3	14	42.4	2	33.3		4	*0.018
month	Rs. 15001-20,000	13	50.0	12	36.4	0	0.0	11.879		
monu	Rs. 20001 and more	2	7.7	7	21.2	4	66.7			
Significant < 0.05										

^{*}Significant<0.05.

DISCUSSION

following sections:

The findings of the study were discussed under the

Section I: Description of mothers according to their socio-demographic variables.

Majority of the mothers 63.1% were in the age group of 25-29 years, 18.5% mothers were in the age group 30-35 years, 16.9% were in the age group 20-24 years and 1.5% were in the age group of 35 and above. 60.00% completed graduation or diploma, 15.40% mothers were completed secondary education, 13.80% mothers were completed Master degree and 10.80% mothers were completed

Primary education. 84.60% were Home maker, 10.80% mothers were doing private job and 4.60% were doing government job. 83.10% were from Hindu religion and 16.90% mothers were from Muslim religion. 64.7% were from joint family, 29.2% mothers were from nuclear family and 3.1% were from extended family. 60.00% were from urban area and 40.00% mothers were from rural area. 78.50% were having single child and 21.50% mothers were having two children or more. 84.60% had previous knowledge and 15.40% mothers had no knowledge regarding breastfeeding. 45.50% had previous knowledge from health care provider, 21.80% had from family, 12.70% had from friends, 14.50% had from mass media and 5.50% had previous knowledge from personal experience. Majority of the mothers, 41.50% delivered

their children through normal vaginal delivery, 35.40% of mothers undergone LSCS and 23.10% of mothers delivered through assisted vaginal delivery. Majority of the mothers, 41.50% belongs to Rs. 10,000-15,000, 38.50% were belongs to Rs. 15001-20,000 and 20% were belongs to Rs. 20001 and more. This indicates that the majority of mothers of under two-years children were belonged to the income of Rs. 10,000-15,000.

The above findings of the study were supported by a preexperimental study to assess the effectiveness of information booklet about breastfeeding technique on the knowledge of antenatal mothers in selected hospitals, Pune. Researcher used one group pre-test post-test design and selected 101 samples by convenience sampling technique. Finding of this study was 48.51% of samples was in age group 23-26 years. The mean knowledge scores about breastfeeding techniques obtained from antenatal mothers in pre-test was 8.64 and post test score was 19.14. This show statistically significant difference at p<0.05 level which t value of 18.74. Researcher concluded that this study as knowledge was dependent on demographic variables and previous knowledge.¹³

Section II: Analysis of pre-test and post-test knowledge scores and to analyze effectiveness of an information booklet on knowledge regarding breastfeeding among mothers of under two-years children.

The data presented in the Table 3 has revealed that in the pre-test majority 40.00% had inadequate knowledge, 50.80% had moderate knowledge and 9.20% had adequate knowledge. In the post-test majority of the mothers 92.30% had adequate knowledge and 7.70% had moderate knowledge. So, it was concluded that the Information Booklet regarding breastfeeding was effective.

This indicates that information booklet on knowledge regarding breastfeeding was effective in enhancing the knowledge level of mothers of under two-years children.

The above study findings were consistent with the study to assess the effectiveness of information booklet on knowledge and practices of expressed breast milk among working postnatal mothers in selected maternity hospitals at Nellore. Pre-experimental pre-test post-test design was used. 60 post-natal mothers were selected by convenience sampling technique. The level of practice in accordance with pre-test shows that 41 (68.3%) of working post-natal mothers had good practice on expressed breast milk where as in post-test 57 (95%) of working post-natal mothers had excellent practice on expressed breast milk. Thus, the study concluded that information booklet on practice of expressed breast milk was effective in improving the knowledge of working post-natal mothers.¹⁴

The mean post-test knowledge scores of mothers were 25.72 and mean pre-test knowledge score was 15.80. The z value was computed i.e.; -7.007 and p value was <0.001. This shows that the difference between pre-test and post-

test scores of mothers was a true difference and not by chance. Hence, research hypothesis H_1 was accepted.

The above study findings were supported with the preexperimental study to assess the effectiveness of planned teaching programme on knowledge regarding exclusive breastfeeding among the primi antenatal mothers in antenatal clinic of selected hospitals of Karad. 100 primi antenatal mothers were selected by purposive sampling technique.

The result of the study showed that in pre-test antenatal mothers had maximum knowledge (62.50%) in the area of misconception related to exclusive breastfeeding, while minimum knowledge (31.28%) regarding exclusive breastfeeding. However, in post-test they gained maximum knowledge (45.8%) regarding position during exclusive breastfeeding and minimum knowledge (7%) regarding misconception of exclusive breastfeeding, after the administration of planned teaching programme. The pre-test and post test data analysis revealed that the mean post score 22.73 and standard deviation 4.28 was higher than the mean pre-test score 10.84 standard deviation 4.25. Thus, the study concluded that the planned teaching programme was effective by gaining knowledge regarding exclusive breastfeeding among primi antenatal mothers. ¹⁵

Section III: Association between the pre-test knowledge scores with their selected socio-demographic variables.

The data given in Table 6 shows that the Chi square test was used to find out the association between pre-test knowledge scores with their selected socio demographic variables. The finding of the Chi square test shows that there was an association between the pre-test knowledge scores with their specific socio demographic variables like: age in years, education, occupation, family income per month regarding breastfeeding. Here the p value in each case was less than 0.05 (level of significance). It shows that research hypothesis H_2 was accepted.

The findings of the chi-square test also shows that there was no association between the pre-test knowledge scores with their specific socio demographic variables like: religion, type of family, residential area, number of under two year children, previous knowledge regarding breastfeeding, source of previous knowledge and mode of delivery.

The above study findings were consistent with a descriptive study to assess the knowledge on practice regarding breastfeeding among postnatal women seeking medical services in Shri Vinoba Bhave civil hospital, Silvassa. The objectives of the study were to assess the knowledge on practice regarding breast feeding among postnatal women and to find out the association between the findings and selected socio- demographic variable. By convenient sampling technique 65 postnatal women were selected. The result of the study showed that most of the post-natal women i.e.; 59% had very good knowledge,

23% had good knowledge, 6% had poor knowledge and no one had very poor knowledge.

All demographic variables and level of knowledge are associated in which the table value is greater than the calculated ' χ^2 ' value at 0.05 level of significance. Thus, the study concluded that post-natal women had good level of knowledge on breast feeding practice. Demographic variables have no significant effect on the knowledge of samples regarding breast feeding practice.¹⁶

Limitations

The study was limited to all the questions of questionnaire might not be answered by the participants, sample might be drop out. Long term follow-up could not be carried out due to time constraints.

CONCLUSION

From the findings of the study, it has been observed that the knowledge regarding breastfeeding among mothers of under two-years children in the post test knowledge score is higher than the pre-test knowledge score. The study findings proved that the information booklet is effective to increase the knowledge regarding breastfeeding among mothers of under two-years children. So, there is need of providing proper information, demonstration and education regarding breastfeeding. So, the health care provider should provide education to improve their knowledge regarding breastfeeding among mothers of under two-years children.

Recommendations

On the basis of findings of the study the following recommendation have been made that this study can be conducted on large sample for better generalization of research study on large population. A comparative study can be carried out to ascertain the knowledge and attitude between. Rural and urban area as a whole.

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