"Effectiveness Of Structured Teaching Programme On Knowledge Regarding Exclusive Breast Feeding Among Primigravida Mothers"

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Abstract: Background: A pre-experimental study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding exclusive breast feeding among primigravida mothers at kalakote community area, Rajouri, Jammu and Kashmir. A total sample of 60, primigravida mothers were selected using non-probability convenient sampling. The objectives of the study were to assess the pre-test level of knowledge regarding exclusive breast feeding and to find the effectiveness of structured teaching program on knowledge regarding exclusive breast feeding among primigravida mothers. The final objective was to find out the association between pre-test score of primigravida mothers with socio-demographic variables. **Materials and Methods:** A one-group pre-test post-test design was used to conduct the study. A sample comprising of 60 primigravida mothers were enrolled using non-probability sampling technique. Tools used for data collection were demographic Performa and structured knowledge questionnaire. Results: Data analysis was done using descriptive and inferential statistics. Findings of the study revealed that the mean post-test knowledge score 26.15 ± 3.66 was significantly higher than the mean pre-test knowledge score 11.58 ± 4.17 (p<0.05). Paired t value computed at 39.58 was statistically significant at p<0.05. which revealed that, there is significant increase in the mean post-test knowledge score. There was no significant association was observed at 0.05 between pre-test level knowledge scores and selected demographic variables. **Conclusion:** The findings of the study clearly showed that the structured teaching programme was significantly effective in improving the knowledge regarding exclusive breast feeding among primigravida mothers. **Key Word:** Effectiveness, knowledge, exclusive breast feeding, primigravida mothers, structured teaching programme,

Introduction

Providing sufficient nutrition during infancy and early childhood is crucial for supporting optimal growth, health, and development in children. Globally, breastfeeding is widely acknowledged as highly beneficial for both mother and child, as breast milk is regarded as the most complete and suitable source of nutrition for infants. Additionally, breastfeeding offers economic and social advantages, benefiting families, healthcare systems, and employers alike[1]. Exclusive breastfeeding is crucial for the optimal growth, development, and health of infants. It provides all the necessary nutrients and immune protection during the first six months of life, supporting strong physical and cognitive development. Additionally, exclusive breastfeeding offers numerous health benefits for the mother, such as reduced risk of certain cancers and enhanced postpartum recovery. It also delivers economic and social advantages by reducing healthcare costs and fostering stronger mother-child bonding[2].A study was conducted in Rajavithi Hospital with an aim to identify the prevalence of exclusive breast-feeding after 2,4, and 6 months in Rajavithi Hospital. The present study evaluated the factors associated with discontinuing breast-feeding before the first two months of life in order to target early nursing interventions to encourage and support continued breast-feeding and increase the exclusive breast-feeding rate. From September 2010 to May 2011, mothers were interviewed prior to hospital discharge from the maternity ward and follow-up phone calls were made after 2,4 and 6 months postpartum. The prevalence of exclusive breast-feeding after 2, 4 and 6 months was 57.9% (252 out of 435), 32.0% (139 out of 435) and 4.8% (21 out of435) respectively. At 2 months postpartum, multivariate analysis was carried out to identify whether maternal obesity and breast-feeding intervals of more than 3 hours had a statistically significant association with cessation of breast-feeding. The most common reason for cessation of exclusive breast-feeding by mothers was their return to work. The prevalence of exclusive breast-feeding at 2, 4, and 6 months was 57.9%, 32.0% and 4.8%, respectively. Maternal obesity, and maternal breast-feeding for intervals of more than 3 hours prior to hospital discharge were risk factors of early breast-feeding cessation at 2 months postpartum. This is an area on which we would target nursing interventions to prevent early unintended weaning[3]

II. OBJECTIVES

1. To assess the pre-test level of knowledge regarding exclusive breast feeding among primigravida mothers.
2. To find the effectiveness of structured teaching program on knowledge exclusive breast feeding among primigravida mothers
3. To find out the association between the pre-test score of primigravida mothers with socio- demographic variables.

III. HYPOTHESES

H_1- There may be a significant difference between the pre-test and post-test knowledge score primigravida mothers regarding exclusive breast feeding.

H_2- There may be a significant association between pre-test knowledge scores and selected socio-demographic variable.

IV. RESEARCH METHODOLOGY

Research Approach: Pre- experimental approach.

Research Design: One group pre-test – post-test design.

Population: primigravida mothers

Settings: Kalakote community area, Rajouri, Jammu and Kashmir.

Sampling Technique: Convenience sampling technique.

Sample size: 60 Primigravida mothers.

Tools and Technique

I) A Demographic Performa was used to collect socio demographic data such as age in years, education of the spouse and mother, occupation of the spouse & mother, monthly family income, type of family, previous source of information.

II) A Structured knowledge questionnaire was used to assess the knowledge of primigravida mothers regarding exclusive breast feeding which consisted of 30 items divided into 5 components (Introduction and definition, composition of breast milk, advantages to baby, advantages to mother, advantages to family and society, breast feeding technique)

Method of Data collection: Data was collected for a period of one month [9th January 2018 to 9th February 2018].

After explaining the purpose and obtaining an informed consent, the pre-test was administered for the samples followed by a structured knowledge questionnaire. After a period of 07 days a post test was carried out for the samples.

Inclusion criteria:

Primi gravida mothers who were willing to participate in the study

Primi gravida mothers who were available at the time of data collection

Exclusion criteria:

Primi gravida mothers who were sensitized to any research study on exclusive breast feeding.

Primi gravida mothers who were psychologically and physically unfit during the time of data collection

V. STATISTICAL ANALYSIS

Both Descriptive and Inferential statistics were used to analyse the data. Descriptive statistics such as Frequency distribution and percentage were used to describe the socio demographic data and Inferential statistics such as student t test was used to find out the effectiveness of STP by comparing the mean knowledge scores, paired t-test was used to determine the difference between mean knowledge scores before and after the intervention. Chi-square was performed find out the association between knowledge and selected demographic variables. The level $P < 0.05$ was considered as the minimum accepted level of significance.

Table 01: Frequency distribution and percentage of sample characteristics (N=60)

Demographic variables		Frequency	Percentage
Age	<20 years	37	61.7
	21-30 years	22	36.7
	>30 years	01	1.6
Education of the Spouse	No formal education	02	3.3
	Primary education	23	38.3
	High school	19	31.7
	PUC and above	16	26.7
Education of the mother	No formal education	1	1.7
	Primary education	33	55.0
	High school	18	30.0
	PUC and above	8	13.3
Type of family	Nuclear family	41	68.3
	Joint family	19	31.7
Occupation of the Spouse	Daily wages	24	40
	Home maker	2	3.3
	Private employed	28	46.7
	Govt employed	6	10
Occupation of the mother	Daily wages	19	31.7
	Home maker	28	46.7
	Private employed	10	16.6
	Govt employed	3	5.0
Family Income	≤ 10000/-	27	45
	10001-20000/-	27	45
	20001-30000/-	06	10
Previous source of information	Mass media	32	53.3
	Magazine	19	31.7
	Friends and family	8	13.3
	Others	1	1.7

Table 02: Frequency distribution and percentage of pre-test and post-test knowledge level regarding exclusive breast feeding among primigravida mothers (N=60)

Levels		Pre-test		Post-test	
		Frequency	Percent	Frequency	Percent
Knowledge	Adequate	0	0	47	78.3
	Moderate	24	40	13	21.7
	Inadequate	36	60	0	0
	Total	60	100	60	100

Figure 01: Bar Diagram showing frequency distribution and percentage of pre-test and post-test knowledge level regarding exclusive breast feeding among primigravida mothers.
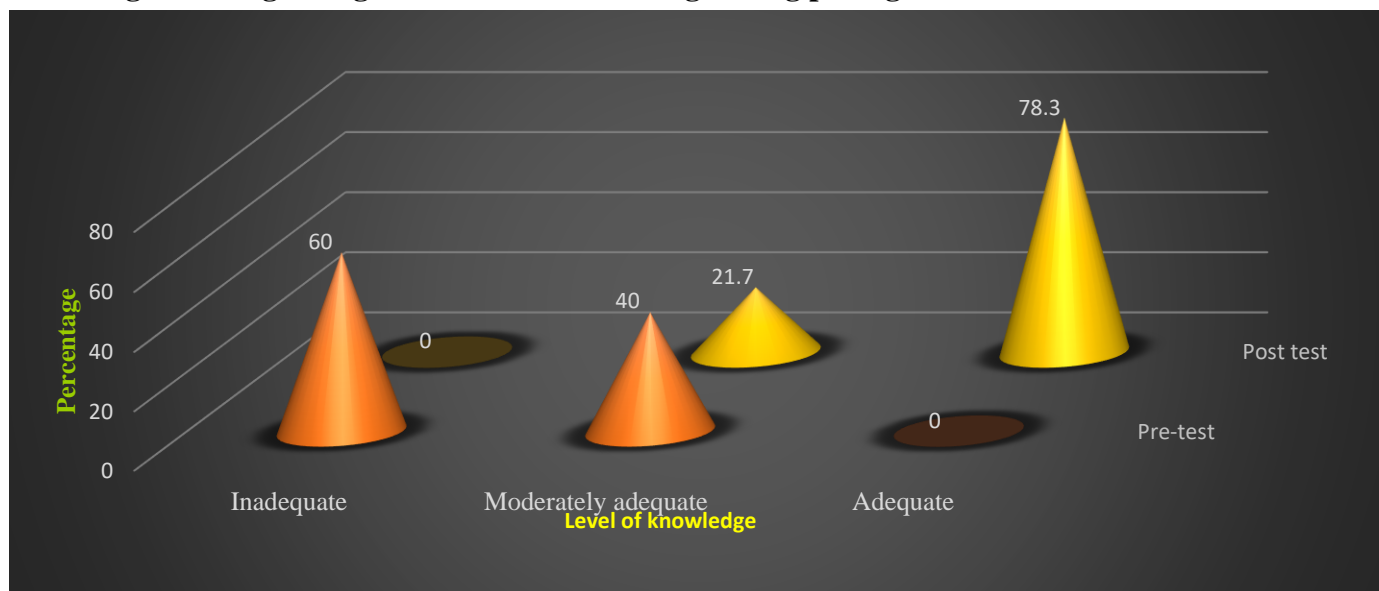

Table 03: Mean, Standard deviation and paired 't' value of knowledge level among primigravida mothers before and after STP. (N=60)

Stage	Mean	SD	Mean Difference	df	Paired t	p
Pre-test	11.58	4.17				
			14.50	59	39.58*	0.001
Post-test	26.15	3.66				

* Significant at 0.05 level

Table 03 shows that mean knowledge score before the structured teaching programme was 11.58±4.17 and after the intervention (structured teaching programme), the mean knowledge score increased to 26.15 ±3.66. Increase in knowledge score after structured teaching programme was statistically significant (p<0.05). Change in knowledge score at post-test was statistically significant. Hence research hypothesis (H$_1$) was accepted.

Table-04: - Area wise Mean, SD, Mean Difference and 'Paired t value' of level of knowledge among primigravida mothers before and after the intervention.

SL NO	Area	Stage	Mean ± SD	Mean Difference	df	Paired t value	P value
01	Introduction and Definition	Pre-test	3.47±0.91	4.93	59	35.15 *	0.001
		Post-test	8.40 ±0.84				
02	composition of breast milk advantages to mother	Pre-test	2.08±0.72	2.43	59	19.93 *	0.001
		Post-test	4.52±0.70				
03	advantages to baby and mother	Pre-test	1.72±0.88	1.98	59	16.21*	0.001
		Post-test	3.7±0.67				
04	advantages to family and society	Pre-test	3.03±1.14	4.61	59	27.17*	0.001
		Post-test	7.65±0.89				
05	breast feeding technique	Pre-test	1.28±0.52	.58	59	6.08*	0.001
		Post-test	1.87±0.56				

Table 05: Association between the knowledge among primigravida mothers with the selected demographic variables.

Demographic variables	Knowledge level				Chi-square test (χ2)	Df P value
	Inadequate		Moderate			
	N	%	N	%		
Age						
<20 years	14	58.3	23	63.9	1.01	df=2 p=0.60(NS)
21-30 years	10	41.7	12	33.3		
>30 years	0	0	0	2.8		
Education of the Spouse						
No formal education	2	8.3	0	0	4.00	df=3 p=0.26NS)
Primary education	7	29.2	16	44.4		
High school	8	33.3	11	30.6		
PUC and above	7	29.2	9	25.0		
Education of the mother						
No formal education	0	0	1	2.8	3.74	df=3 p=0.29(NS)
Primary education	15	62.5	18	50		
High school	8	33.3	10	26.9		

PUC and above	1	4.2	7	19.4		
Type of family						
Nuclear family	19	79.2	22	61.1	1.12	df=3 p=0.77(NS)
Joint family	5	20.8	14	38.9		
Occupation of the father						
Daily wages	8	33.3	16	44.4	3.46	df=3 p=0.32(NS)
Home maker	1	4.2	1	2.8		
Private employed	13	54.2	15	41.7		
Govt employed	2	8.3	4	11.1		
Occupation of the mother						
Daily wages	6	25.	13	36.1	1.59	df=2 p=0.45(NS)
Home maker	13	54.2	15	41.7		
Private employed	5	20.8	5	13.9		
Govt employed	0	0	3	8.3		
Monthly family Income						
≤ 10000/-	11	45.8	16	44.4	2.16	df=1 p=0.11(NS)
10001-20000/-	12	50	15	41.7		
20001-30000/-	1	4.2	5	13.9		
Previous source of information						
Mass media	12	50.0	20	55.6	1.11	df=3 p=0.77(NS)
Magazine	8	33.3	11	30.6		
Friends and family	4	16.7	4	11.1		
Others	0	0	1	2.8		

(p<0.05 significant level) NS-Non-Significant

The Chi-square and fisher's exact were performed to find out the association between knowledge with selected demographic variables. In the present study, it is found that there is no significant association with knowledge regarding exclusive breast feeding with selected demographic variables. Hence the research hypothesis H_3 is not accepted

VII. DISCUSSION

The findings in the present study revealed that the mean post-test knowledge score 26.15±3.66 was significantly higher than the mean pre-test knowledge score 11.58±4.17 (p<0.05). Paired t value computed at 39.58* was statistically significant at p<0.05. The paired t value [39.58*] computed by comparison of the mean pre-test and post-test knowledge scores was statistically significant at P<0.05 level. Therefore, it is interpreted that structured teaching programme was significant in improving the knowledge regarding exclusive breast feeding among primigravida mothers This result is supported by various studies. A cross-sectional questionnaire survey was conducted among 235 infant-mother pairs in five Baby Friendly pairs in five Baby Friendly Hospitals in Enugu-Nigeria in 1998. The aims were to study their breast-feeding practices and associated factors. The exclusive breast-feeding rate was 33.3% while the predominant breast-feeding rate was 50.2%. Factors associated with exclusive breast-feeding included infants' birth order (P = 0.015), fathers' education (P =0.0244), mothers' education (P = 0.000001), occupation (P = 0.0069) and parity (P = 0.004). However, the infants' age (P = 0.054) and sex (P = 0.403), mothers' age (P = 0.2005), number of breast-feeding counselling attendances (P = 0.0883) and the breast-feeding initiator (P = 0.473) were comparable irrespective of breast-feeding practice. In the mothers' perspectives, the commonest reasons for not breastfeeding exclusively included; insufficient breast milk (58,37.0%) and the sociocultural practice of giving water to babies because of the hot climate (52,33.1%). For an improvement in the exclusive breast-feeding rate of this population, health workers should highlight to mothers the dangers of water supplementation and the dynamics of breastmilk supply through health education, home visits and the formation of community-based lactation support groups[4]. The present study evaluated the impact of a structured teaching programme (STP) on the knowledge of primigravida mothers regarding exclusive breastfeeding. The findings revealed a significant improvement in post-test knowledge scores, indicating that the STP was effective in enhancing maternal understanding of exclusive breastfeeding practices. These results are consistent with previous studies that have demonstrated the efficacy of educational interventions in improving breastfeeding knowledge among antenatal mothers. Chakraborty (2017) reported that structured teaching significantly increased awareness about colostrum, early initiation, and the duration of exclusive breastfeeding among antenatal women[5]. Similarly, Patrick (2016) found that STPs led to a marked rise in knowledge scores, with post-test averages significantly higher than pre-test scores[6]. Exclusive breastfeeding is globally recognized as a critical determinant of infant survival and maternal health. According to WHO guidelines, exclusive breastfeeding for the first six months provides optimal nutrition and immunological protection[7]. Studies have shown that infants who are not exclusively breastfed are at higher risk of infections such as diarrhea and pneumonia, which contribute significantly to neonatal mortality[8]. The effectiveness of the STP in this study can be attributed to its structured content, use of visual aids, and culturally appropriate delivery. The programme emphasized key components such as early initiation, benefits of colostrum, and techniques for proper latching and positioning. These elements are supported by evidence from Lulie et al. (2008), who found that postpartum education using multimedia tools significantly improved breastfeeding rates[9]. Demographic analysis revealed that mothers with higher education levels and prior exposure to health education showed greater improvement in knowledge scores. This aligns with findings by Callen et al. (2009), who noted that maternal education and socioeconomic status are strong predictors of breastfeeding practices[10].

VIII. CONCLUSION

The study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding exclusive breast feeding among primigravida mothers. The results of the study undoubtedly confirm that the post-test knowledge score is significantly higher than the pre-test knowledge score. Therefore, it is concluded that STP was effective in enhancing the knowledge regarding exclusive breast feeding among primigravida mothers. Also, the study reinforces the importance of structured teaching programmes in promoting exclusive breastfeeding among primigravida mothers. It advocates for the integration of such interventions into routine antenatal care, particularly in rural and underserved settings where breastfeeding knowledge may be limited.

XI. LIMITATIONS

- The study is limited to primigravida mothers of kalakote community area.
- The study assessed only knowledge component of primigravida mothers regarding exclusive breast feeding.
- Small number of respondents (60) limits the generalization of the study.
- The study did not use any control group.

X. RECOMMENDATIONS

- A similar study may be conducted on a larger sample for generalization of the study findings.
- A similar study can be conducted among other age groups and public.
- A similar study may be conducted in other backward districts, taluks, villages etc.

XI. AKNOWLEDGEMENTS

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