



Effect of Breastfeeding during 3rd Stage of Labour on Selected Infant Parameters among Primimothers in a Selected Hospital, Kerala

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Abstract:

Objectives: To evaluate the effect of breastfeeding during 3rd stage of labour on selected infant parameters among primimothers. **Method:** A quantitative approach with quasi-experimental non equivalent control group posttest only design was adopted. Using purposive sampling technique, 150 infants of primipara mothers; 75 each in control and intervention groups were selected. Tools used for the study were breastfeeding efficiency scale, infant clinical proforma for assessing infant weight gain and elimination. **Result:** By 48 hrs of delivery, the mean breastfeeding efficiency was found to be 12.21 for the infants of control group compared to the higher mean breastfeeding efficiency of 12.40 among infants of intervention group. The mean weight gain, frequency of urine and meconium were found to be higher among intervention group than the control group. The morbidity was found to be more for the infants of control group compared to that of intervention group. Early breastfeeding was found to be a key factor in improving the infant clinical parameters and reducing infant morbidity in an effective and efficient manner.

Key words: breastfeeding, weight gain, infant clinical proforma, breastfeeding efficiency, morbidity.

INTRODUCTION

Child bearing brings fragrance and meaning to life. Children are the gifts from God. First five years in a child's life are fundamentally important because it paves the foundation that shapes children's future health, growth, development, happiness and learning achievement at school, family, community and life in general. They need love and nurturing to develop a sense of trust and security that turns into confidence as they grow².

If virtually every new mother breastfed her baby, more than 800,000 children's lives would be saved every year and thousands of future breast cancer deaths could be avoided. The research findings suggest breast milk is "a personalized medicine for infants" and millions of children are failing to receive the full benefits provided by breastfeeding.¹

The ideal food for the young infant is human milk, which has specific characteristics that match the growing infant's nutritional requirements during the first year of life. It has diverse and compelling advantages to infants, their mothers, family and society. These include health, nutritional, immunological, developmental, psychological, social, economic and environmental benefits³.

STATEMENT OF THE PROBLEM

A study to determine the effect of breastfeeding during 3rd stage of labour on selected infant parameters among primimothers in a selected hospital, Kerala

OBJECTIVE

Find out the effectiveness of breastfeeding during third stage of labour on selected infant parameters.

HYPOTHESIS

H₁: There is a significant difference in the infant parameters between infants of primimothers in the control and intervention groups.

METHODOLOGY

Research Approach: Research approach used for the study was quantitative approach.

Research Design: The design adopted for the study was quasi-experimental non equivalent control group posttest only design. **Study Setting:** The study was conducted at Crescent Medical Centre, Alathur, Palakkad, Kerala among the infants of primipara mothers who fulfilled the inclusion criteria using purposive sampling technique. Data were collected using different tools and analysed using descriptive and inferential statistics.

Tools and techniques

- **Infant Clinical Assessment Proforma.**

Section A - Infant Breastfeeding Assessment Tool (IBFAT) (Modified), which consisted of 6 parameters rated on a 4 point rating scale (0 to 3) for assessing infant breastfeeding efficiency.

Section B - Infant Elimination Behaviour. It consisted of assessment of the frequency of meconium and urine passed by the infant on 1st and 2nd postnatal days.

Section C - Infant Weight Assessment: assessment of weight gain of infant at 1½, 2½ and 3½ months.

RESULTS:

Table 1. Comparison of Mean Scores of Breastfeeding Efficiency between Infants of Mothers in the Control and Intervention Groups

(N = 150)

Time Point of Measurement	Breastfeeding Efficiency Score				F ratio	p value
	Control group (n=75)		Intervention group (n=75)			
	Mean	SD	Mean	SD		
48 hours of delivery	12.21	1.02	12.40	1.00	0.497	0.001** (S)
F-ratio	5093.206**		5820.654**			

**Significant at 0.001 level NS - Non Significant Maximum Score = 18

Table illustrates the comparison of mean scores of breastfeeding efficiency between infants of mothers in control and intervention groups. By 48 hours of delivery, the infants

of mothers in the intervention group had a higher mean breastfeeding efficiency score (12.40) compared to the control group (12.21) at p<0.001.

Table 2. Comparison of Mean Scores of Elimination Characteristics of Infants in the Control and Intervention Groups

(N = 150)

Variables	Control group (n=75)		Intervention group (n=75)		Z value	P Value
	Mean	SD	Mean	SD		
Meconium						
Frequency on 1 st day	1.76	0.67	1.92	0.56	1.29	0.198 (NS)
Frequency on 2 nd day	3.47	0.96	4.92	0.94	7.62	<0.001** (S)
Urine						
Frequency on 1 st day	2.76	0.65	4.21	0.66	9.21	<0.001** (S)
Frequency on 2 nd day	5.49	0.92	8.72	1.32	10.18	<0.001** (S)

** Significant at 0.001 level

The above table shows the mean scores of elimination characteristics of infants as reported by the mothers. The mean frequency of meconium on the first and second day was higher among the infants of the mothers in the intervention group (1.92 and 4.92 respectively) than that of infants of the mothers in the control group (1.76 and 3.47

respectively) and the p value <0.001 was significant on the 2nd day.

The mean frequency of urine during first and second day was found to be significantly higher among the infants of mothers of intervention group (4.21 and 8.72 respectively) than that of control group mothers (2.76 and 5.49 respectively) and the p value <0.001 was significant on the 1st and 2nd days.

Table 3. Comparison of Mean Scores of the Weight gain among Infants in the Control and Intervention Groups.

(N = 150)

Time point of assessment	Weight gain (in grams)				Z value	p value
	Control group (n=75)		Intervention group (n=75)			
	Mean	SD	Mean	SD		
1½ months	962.27	55.89	1046.67	83.01	7.30	<0.001**
2½ months	900.53	50.08	933.6	58.53	3.72	<0.001**
3½ months	628.27	64.52	658.93	71.12	2.77	0.006**

** Significant at 0.001 level

The significant p value (<0.001) at all points of measurement revealed that there was a statistically significant difference between weight gain of infants of mothers in the control and intervention groups.

Table 4. Distribution of Infants Based on the Morbidity among infants of control and intervention groups. (N = 150)

Time points of Assessment	Morbidity	Infant morbidity			
		Control group (n=75)		Intervention group (n=75)	
		No.	%	No.	%
1½ months	Common cold	1	1.33	1	1.33
	Fever	5	6.67	1	1.33
	Constipation	-	-	-	-
	Diarrhea	1	1.33	1	1.33
2½ months	Common cold	3	4	3	4
	Fever	2	2.67	2	2.67
	Constipation	-	-	-	-
	Diarrhea	1	1.33	0	0
3½ months	Common cold	2	2.67	3	4
	Fever	4	5.33	2	2.67
	Constipation	-	-	-	-
	Diarrhea	2	2.67	0	0

From the above table it is evident that the infants in the control group had more morbidity compared to those in the intervention group at various time points of measurement.

DISCUSSION

The present study findings are congruent with a descriptive study conducted in Libya among 192 mothers with an aim to assess latching, positioning and effective sucking of babies and the findings revealed that 42.8% neonates demonstrated poor sucking in early neonatal period due to poor attachment and latching to the breast³.

The findings are supported by a study conducted in Tamil Nadu, India, among 150 postnatal mothers to assess the effectiveness of early initiation of breastfeeding which revealed that on the 2nd postnatal day the frequency of meconium was significantly higher in the intervention group compared to control group with p value <0.001¹.

The study findings are supported by a RCT among 298 mother-baby dyads in Faridabad to evaluate the effects of very early skin to skin contact between babies and their mothers. The infants showed significantly lesser weight loss in the study group (4% ± 1.98%) than the control group (6.1% ± 2.6%) at the time of discharge (p <0.0001). Also, at first follow-up visit on day 4 or 5 of life, the weight loss was less in the study group infants (6.3% ± 2%), when compared with that of the control group (9.2% ± 2.8%) (p <0.001)⁴.

CONCLUSION

The benefits of Breastfeeding are unmatched when it comes to the infant's health and growth. After all, breast milk sets the foundation for your kid. Breastfeeding is a common phenomenon and far underrated in terms of awareness. Every mom breastfeeds her child but not every mom knows how to do it right or what are the advantages of this god given mercy.

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