

ORIGINAL ARTICLE

Assess 3 I's (Instruction, Initiation, Improvement) as a Road Map to Breastfeeding Success among Postnatal Mothers at NMCH, Nellore, A.P, India

Usha Kiran Thirunavukarasu^{1,2}, Indira Armugham^{1,2}, Amiya Bhaumik¹, Smitha P M^{1,2}, Aruna Gundluru^{1,2}, Viji Alex^{1,2}, Bibi Florina Abdullah¹

¹ Lincoln University College, Wisma Lincoln, No. 12-18, Jalan SS 6/12, 47301, Petaling Jaya, Selangor Darul Ehsan, Malaysia

² Narayana college of Nursing, Chinthareddypalem, Nellore, Andhra Pradesh 524002, India

ABSTRACT

Introduction: Breastfeeding has numerous health benefits and ensures that new-borns receive all essential nutrients during their first few months of life. Breastfeeding should begin within the first hour of birth, according to WHO guidelines. "Early commencement of breastfeeding" refers to feeding infants a mother's breast milk within an hour after delivery. This ensures that the children receive colostrum, or "first milk," which is high in protective elements, as soon as possible after delivery. **Method:** Quasi experimental research design was adopted and 100 postnatal mothers to assess their breastfeeding concept using a structured questionnaire and observational check list. **Results:** Frequency and percentage distribution of the breastfeeding problems among postnatal women (30%) had moderate knowledge, (51%) had low knowledge, (19%) had adequate knowledge. Mean and Standard deviation regarding breastfeeding problems among postnatal mothers, 24.46 is mean and 6.967 is standard deviation and 48.534 is its variance statistically significant at the level of $p < 0.05$ the findings state that effect on initiating breastfeeding, and those women of lower parity had greater intention to breastfeed and parous women had moderate knowledge about due to the physical condition in postnatal the early initiation of breastfeeding is not much effective. **Conclusion:** The concept of early commencement of breastfeeding and breast-feeding procedures were unfamiliar to postnatal women. The mother's cultural and physical factors continue to impact when colostrum is given to the newborn. To implement the notion of breast feeding, postnatal mothers must get sufficient knowledge during the antenatal period.

Keywords: Breastfeeding, Postnatal Women, Early initiation of breast feeding

Corresponding Author:

Usha Kiran Thirunavukarasu, Master in Nursing
Email: ushakiranmsc13@gmail.com
Tel: +91 7097350029

INTRODUCTION

Historically, the only way to serve a newborn was to breastfeed them, whether that was the biological mother or a wet nurse, infants are expected get benefited from milk that was specifically made for them. This provides acquired immunity as well as the emotional bond provided through breastfeeding, which has become characterized as attaching or bonding (1). Breastfeeding is the best source of nutrition for newborns during their first year of life when their physiological and developmental growth is at its fastest. Early initiation of breastfeeding demonstrated short- and long-term medical and neuro developmental benefits, it also improves sensory and cognitive development, and is one of the most cost-effective approaches to prevent infant morbidity and

death from diarrhoea, respiratory infections, and other illnesses (2,3). Early or timely initiation of breastfeeding, specifically within 1 h of birth, refers to the best practice recommended to mother and the newborn by the World Health Organization (WHO) (4). The identified barriers to the early initiation of breastfeeding in South Asia have been synthesized as supply-side and demand-side barriers (2). Early breastfeeding can save 250,000 lives in India alone by lowering fatalities caused by diarrheal diseases and lower respiratory tract infections in children. Despite an increase in hospital delivery to approximately 79 percent nationally, the number of children breastfed within one hour of birth is less than 42 percent, according to the National Family Health Survey 4 (NFHS-4). According to several reports, breastfeeding rates are dropping in practically all countries of the world, owing to increased industrialization, the advent of artificial feeds, and the early introduction of complementary feeds (3). During the twentieth century, breastfeeding became less common in high-income countries. In low- and middle-income countries,

similar tendencies were observed in better-educated, wealthier, and metropolitan women (6). Breastfeeding can be encouraged by bolstering existing antenatal breastfeeding counselling, informing all pregnant women about the benefits of breastfeeding, and motivating them by dispelling their misconceptions about breastfeeding and informing them that breastfeeding is the healthiest and safest way to feed babies (7, 8). The variables of breastfeeding that have been highlighted are amenable that early initiation can be protected, promoted, or support better in such a way that the newborn gets their complete benefit by breastfeeding (6). Low rates of exclusive breastfeeding and early commencement of breastfeeding can be attributed to a lack of adequate information being provided to women (5).

MATERIALS AND METHODS

Postnatal mothers' knowledge does not significantly influence the pattern of breastfeeding practices they adopt in early initiation. The research approach was to educate with video assisted teaching for postnatal mothers on aspects of early incitation of breastfeeding, latching on techniques, exclusive breast feeding is implemented using a quantitative approach. Quasi experimental research design was adopted; the study was conducted in postnatal ward in Obstetric and Gynaecological Department at Narayana Medical College Hospital, Nellore. The accessible population was postnatal mothers in postnatal ward and new mothers at postnatal visits. The sample was chosen using a simple random sampling technique using random numbers, with a total of 100 postnatal mothers meeting the inclusion criteria: a) mothers of healthy 0-6-month-old babies, b) Between 37 and 42 weeks of pregnancy, or just born baby c) without major birth defects like congenital heart disease, cleft lip/cleft palate, or Down syndrome, and d) who consented to take part. Exclusion criteria were Antenatal mothers in early pregnancy, with comorbid diseases. Total hundred mothers enrolled in the study. Participants' demographic information was gathered, including their age, religion, location of residence, employment, education, and family's monthly income, as well as the kind of delivery, number of children, exclusive breastfeeding, and breastfeeding initiation. A structured questionnaire was used to assess knowledge and practises, myths about early breastfeeding vs. early breastfeeding initiation benefits, latching on techniques, different breastfeeding methods, breast care and massage, and exclusive breastfeeding benefits to mother and baby to postnatal mothers. Check list of thirty questions with possible response as yes/no/don't know. Approximately half of the thirty questions were framed with 'No' as the correct response.

Description of the Tool

The tool was created after a thorough analysis of many textbooks, journals, and websites. The tool was developed to assess the effectiveness of video assisted

teaching on aspects of Myths on early breastfeeding Vs Early breastfeeding initiation benefits, latching on techniques, different breastfeeding methods, breast care and massage, exclusive breastfeeding benefits to mother and baby was educated to the postnatal mothers.

Ethical clearance

The study protocol was approved by the institutional ethics committee and the principles of the Declaration of Hospital and the regulations on personal data protection were followed. All participants signed an informed consent form Narayana college of nursing, Nellore, India file no/PhD(N)LU2018 dated 6th June 2018.

Procedure for Data Collection

All moms were given an explanation of the study's goal after receiving approval from hospital personnel. The mothers who decided to take part in the study had to complete an informed consent form. The data was collected by the investigator in wards with the structured questionnaires and checklist, it took about 20 minutes to complete. Following the completion of the questionnaire and checklist, the mothers were taught about their incorrect responses. Confidentiality of the study participants was maintained. The score interpretation was given according to score A + (Excellent) 91 – 100 % A (Very good) 81 -90 % B + (Good) 70 – 80 % B (Average) 61 – 70 % C (Fair) 50 – 60 % D (Poor) < 50.

Intervention Protocol

The intervention consists of video assisted teaching for mothers regarding Breastfeeding concept. It is a combination of moving slides of pictures with audio. The video assisted teaching was aimed to improve the knowledge regarding breastfeeding concept. The duration of video assisted teaching was 40 minutes. The video includes Myths on early breastfeeding Vs Early breastfeeding initiation benefits, latching on techniques, different breastfeeding methods, breast care and massage, exclusive breastfeeding postnatal care, postpartum clinic visit and postnatal care regarding diet, rest, hygiene breastfeeding methods, breast care and massage, exclusive breastfeeding postnatal care, postpartum clinic visit, concept was delivered to the study participants. Video assisted teaching on safe motherhood was given to experimental group and the control group was advised to follow the routine antenatal care. Following the session on the same day, both groups were given a post-test utilising the same structured questionnaire and checklist. Using descriptive and inferential statistics, data was categorised and analysed based on the study's objectives.

RESULTS

Data collection and analysis were organized, analyzed, and interpreted using descriptive and inferential statistics in accordance with the study's objectives. Frequency and percentage distribution mean and standard deviation

of socio demographic variables of postnatal mothers, level of knowledge regarding breastfeeding aspects and techniques among postnatal mothers in experimental group and control group comparison was identified. Association between posttest knowledge scores with selected socio demographic variables among postnatal mothers on breastfeeding aspects Table I Explains that among 100 primipara women with regard to age (52%) are between 18-23 years, and (37%) are between 24-29 years, and (11%) are between 30-35 years. (76%)

Table I: Association between breastfeeding problems among postnatal women with their socio demographic variables

Demographic variables	Mild		Moderate		Severe		Chi square
	(F)	(%)	(F)	(%)	(F)	(%)	
Age of a mother							C=2.259 T=2.241 df=4 S*=0.05
18-23 years	14	14	30	30	8	8	
24-29 years	12	12	16	16	9	9	
30-35 years	4	4	5	5	2	2	
Religion of mother							C=4.429 T=4.427 df=4 S*=0.05
Hindu	11	11	29	29	8	8	
Muslim	11	11	14	14	5	5	
Christian	8	8	8	8	6	6	
Others	-	-	-	-	-	-	
Education of mother							C=3.069 T=2.989 df=4 S*=0.05
No formal education	-	-	-	-	-	-	
Primary Education	13	13	19	19	8	8	
Secondary Education	12	12	28	28	10	10	
Graduation	5	5	4	4	1	1	
Occupation of mother							C=4.019 T=5.064 df=6 NS=0.05
House wife	24	24	38	38	17	17	
Private Job	1	1	4	4	-	-	
Gov.Job	1	1	1	1	1	1	
Other Job	4	4	8	8	1	1	
Income per month							C=2.223 T=2.173 df=6 S*=0.05
5000-7000/-	5	5	8	8	3	3	
7001-9000/-	3	3	2	2	1	1	
9001-11000/-	13	13	25	25	11	11	
Less than11000/-	9	9	16	16	4	4	
Type of family							C=10.027 T=10.574 df=2 NS=0.05
Nuclear family	27	27	32	32	17	17	
Joint family	3	3	19	19	2	2	
Extended family	-	-	-	-	-	-	
Marital status							-
Married	30	30	51	51	19	19	
Un married	-	-	-	-	-	-	
1-2years	12	12	21	21	7	7	
2-3years	10	10	13	13	6	6	
More than 3years	8	8	17	17	6	6	
Family practices of breastfeeding							-
Yes	50	50	30	30	20	20	
No	-	-	-	-	-	-	
Hydration status of mother							C=5.303 T=5.831 df=4 *NS=0.05
Well nourished	2	2	4	4	1	1	
Nourished	24	24	46	46	15	15	
Moderately nourished	4	4	1	1	3	3	
Poorly nourished	-	-	-	-	-	-	
Mode of delivery of mother							C=0.795 T=0.788 df=2 S*=0.05
Vaginal delivery	16	16	32	32	12	12	
Vacuum delivery	-	-	-	-	-	-	
Forceps delivery	-	-	-	-	-	-	
LSCS	14	14	19	19	7	7	
Vegetarian							C=1.842 T=1.830 df=2 S*=0.05
Vegetarian	8	8	9	9	6	6	
Non-vegetarian	22	22	42	42	13	13	
Ova-vegetarian	-	-	-	-	-	-	
Lacto-vegetarian	-	-	-	-	-	-	
Habits of mother							C=1.99 T=5.99 df=2 S*=0.05
Smoking	-	-	-	-	-	-	
Drinking	-	-	-	-	-	-	
Tobacco chewing	8	8	19	19	4	4	
No dreadful habits	22	22	32	32	15	15	
Source of health information							C=2.931 T=3.135 df=6 NS=0.05
Print and electronic media	5	5	11	11	5	5	
Friends/neighbors	5	5	7	7	1	1	
Family members/relative	4	4	4	4	1	1	
Health personnel	16	16	29	29	12	12	

belongs to nuclear family, (24%) belongs to joint family and none of them belongs to extended family. (100%) have the family practice of breastfeeding. Breast massage techniques (7%) are well nourished, (85%), 8 (8%) is moderately nourished and none of them are poorly nourished. mode of delivery, (60%) underwent vaginal delivery, (40%) is LSCS and none of them underwent vacuum and forceps delivery. Dietary pattern (23%) is vegetarian, (77%) are non-vegetarian, and none of them are ova and lacto-vegetarian. Source of health information (21%) gets information from print and electronic media, (13%) from friends/neighbors, (9%) from family members/relatives and (57%) from health personnel. Table II shows the Frequency and percentage distribution of the breastfeeding problems among postnatal women (30%) had moderate knowledge, (51%) had low knowledge, (19%) had adequate knowledge. Table III shows Mean and Standard deviation regarding breastfeeding problems among postnatal mothers, 24.46 is mean and 6.967 is standard deviation and 48.534 is its variance. Table IV Knowledge levels on breastfeeding among postnatal mothers in experimental group the pre-test mean is 33.5 with SD 4.006. In control group the post-test mean is 23.3 with SD 7.585.

The result showed that frequency of breastfeeding of newborn by their postnatal mothers significantly low. The null hypothesis is therefore rejected in breastfeeding skills. This better breastfeeding skills among the multipara could be due to their past experiences of having breastfed many infants before which shows moderate knowledge,

Table II: Mean and Standard deviation regarding breastfeeding problems among postpartum women

Category	Mean	Std. Deviation	Variance
Problems	24.46	6.967	48.534

Table III: Frequency and percentage distribution of the breastfeeding problems among postnatal women.

CATEGORY	Frequency	Percentage%
Mild Problems	30	30
Moderate Problems	51	51
Severe Problems	19	19
Total	100	100

Table IV: Knowledge on breastfeeding among postnatal mothers

Group	Criteria	Mean	Standard deviation (SD)	Unpaired t test
Experimental group	Pre-test	33.50	4.006	C = 6.491 df =58 T = 0.252 S P < 0.05
Control group	Post-test	23.33	7.586	

and it goes in line with the adage that “practice makes perfect”. However, researchers discovered that parity had minimal effect on breastfeeding initiation, and that women with lower parity showed a greater desire to breastfeed.

DISCUSSION

The knowledge of exclusive feeding practise and related factors among mothers was investigated in this study. Despite the widespread recommendation for early breastfeeding beginning, our research found that only multipara moms nursed within one hour of birth. The reported percentage of regular vaginal births with this method is substantially greater than the quoted average (9).

Early breastfeeding initiation and explanation of benefits, advice on the dangers of pre-lacteal feeding and its long-term risk, and the advantages of exclusive breastfeeding, nature, feeling, position, and other factors. According to statistics, 6% of women never breastfed their children. Colostrums were rejected by 17% of moms. Traditional notions that colostrums were unclean, cheesy, or indigestible, and that the children would suffer from stomach ache were among the reasons given for avoiding feeding it to newborns (10). A standardised questionnaire was utilised to examine knowledge and practises regarding breastfeeding among postnatal moms. The comparison of maternal-infant bonding was done at 24 and 48 hours after delivery, and the results were compared. Only 18% mothers knew about the correct technique of breastfeeding that both nipple and areola be introduced in babies’ mouth for effective suckling by the baby. Also, only 18% of the mothers knew that in case of separation from the baby mother can express milk in a clean container and store at room temperature for 8 hours so as to be fed to the baby.(11) Improper latching leads to ineffective transfer of milk and leads to common problems like sore nipples which ultimately affect the continuation of exclusive breastfeeding.(12,13) Mothers who are visiting postnatal clinics with one child have more time to come to a hospital where their health facilities have the opportunity to obtain information related to breastfeeding practices that are good and right (14).The data collected were analysed and interpreted using statistical methods. The study’s goal was to find out how much knowledge postpartum women have regarding nursing techniques and components. The relationship between post-test moms’ knowledge scores and other demographic parameters found that 60% of breastfeeding mothers come from a nuclear family, whereas 2% come from a joint family. None of them are extended family. The frequency and percentage distribution of breastfeeding practices among mothers was found to be low. The null hypothesis is rejected in breastfeeding skills. It has been suggested that the multipara’s better breastfeeding skills are due to their past experiences. Frequency and percentage distribution

of the breastfeeding problems among postnatal women (30%) had moderate knowledge, (51%) had low knowledge, (19%) had adequate knowledge. Mean and Standard deviation regarding breastfeeding problems among postnatal mothers, 24.46 is mean and 6.967 is standard deviation and 48.534 is its variance.

CONCLUSION

This study’s findings reveal a link between instruction, initiation, and improvement in breast-feeding practises. Because of a variety of factors, postnatal knowledge is sometimes difficult to execute. The importance of exclusive breastfeeding was acknowledged to most postnatal moms, according to this study on knowledge, attitude, and behaviour. As a result, moms must get ongoing assistance in the form of counselling and motivation during the prenatal and postoperative periods. Because so many factors influence children, such as society, the media, and others, the knowledge they obtain does not always match the attitude they have or carry. The same understanding cannot always be put into practise. Special health education related to the prevention of selected breastfeeding problems, techniques and other breast care Educating to postnatal mothers and providing them correct information can help them to prevent complications during the time of breastfeeding.

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