

TO EVALUATE THE EFFECT OF MATERNAL EDUCATION ON INITIATION OF BREASTFEEDING

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Abstract

Background: Breastfeeding practices play an important role in reducing child mortality and morbidity. This study describe the breastfeeding practices.

Methods: This observational prospective study was conducted on 500 newborns delivered at Department of Rajkiya Mahila Chikitsalaya (RMC), Ajmer and outborn section of Department of Pediatrics, Jawaharlal Nehru Medical College & Hospital.

Results: The effect of mother's education on initiation of breastfeeding was found to be significant. The effect of higher family income on early initiation of breastfeeding was found statically significant.

Conclusions: The study emphasizes the need for breastfeeding intervention programs especially for the mothers during antenatal and postnatal check-ups.

Keywords: Breastfeeding, Immunization, Infants.

Introduction

Breast milk is the natural first food for babies and timely initiation of breastfeeding is putting the newborn to the breast within one hour of birth as World Health Organization recommended since 1992¹

The goal of counselling is to protect, promote and support maternal nursing. It is a scientific way of dealing with mother by listening and trying to understanding her, offering her help on planning, taking decision and getting strength how to deal with pressures, thus increasing her confidence and self esteem. Counselling has improved rates of breastfeeding in terms of early initiation and prolonged continuation.²

The professional's knowledge and the practices applied by health services seen to be the most important factors determining the initiation of breastfeeding after deliveries at hospitals, where the mother's decision-making power seems to be limited. In Brazil, private maternities have been associated to larger risks for delayed initiation of breastfeeding, while BFHI accreditation has been considered a protection factor.³

Prenatal assistance should comprise comprehensive care (attention, prevention, and promotion of health). Different indicators of access (number of consults) and quality (prescription of iron, guidance about breastfeeding, and home visits) of prenatal care have been identified as factors associated to the early beginning of breastfeeding. The information about breastfeeding that health professionals convey to the pregnant women during prenatal period would favour the preparation for breastfeeding. Adequate prenatal follow-up, counselling for the practice of

breastfeeding, encouragement and support may contribute to early breastfeeding in the delivery room⁴

Material and Methods

Study Design

This observational prospective study was conducted on 500 newborns delivered at Department of Rajkiya Mahila Chikitsalaya (RMC), Ajmer and outborn section of Department of Pediatrics, Jawaharlal Nehru Medical College & Hospital.

Sample size

Study was conducted on 500 newborn babies consisting of two groups. Group-I was consisted of 250 newborn babies delivered vaginally and Group-II was consisted of 250 newborn babies delivered by caesarean section as per inclusion criteria. An informed consent was taken from the mother.

Inclusion Criteria

1. Babies born at or beyond 33 weeks of gestation.
2. Babies born with birth weight 2000g and more and handed over to mother with satisfactory conditions.

Exclusion Criteria

1. Babies who were sick and admitted to NICU for different conditions like Birth Asphyxia, with Respiratory Distress and other conditions.
2. Babies born with period of gestation less than 33 weeks and with birth weight less than 2000g.
3. Babies of HIV positive mothers.
4. Babies of mothers having PIH and on MgSo₄ treatment.
5. Babies of mothers who were on treatment with cytotoxic drugs and on anti-thyroid drugs.

Antenatal details of mothers including risk factors and bio data of mother including parity of mother (multipara/primipara), mode of delivery (caesarean/vaginal), whether anesthesia during delivery given or not, address (urban/rural), antenatal counselling was provided and other basic details were noted. Age of the mother was noted and categorized into 4 groups as age group 19-23 years, 24-28 years, 29-33 years and 34-38 years.

Educational status of mother was categorized into 7 categories as given below:

Mother's Education

- C-I -Professional degree/Honours, MA and above
- C-II -BA, BSc degree
- C-III -Intermediate/Post high school certificate
- C-IV -High School
- C-V -Middle school completion
- C-VI -Primary school/literate

C-VII -Illiterate

Family income/month was noted and was categorized into 7 groups as given below:

Family Income

- C-I -Rs 19575 and above
- C-II -Rs 9788-19574
- C-III -Rs 7323-9787
- C-IV -Rs 4894-7322
- C-V -Rs 2936-4893
- C-VI -Rs 980-2935
- C-VII -Rs <979

Statistical Analysis

The time of initiation of breastfeeding was noted. Qualitative variables were compared using Pearson Chi-square test. 'p' value <0.05 was taken as significant.

Results

Table 1: comparison of initiation of breastfeeding with mother's educational status

Mother's Educational Status	Time of Initiation of Breastfeeding (min-hrs) (group-I & group-II)								P Value
	0-1hr		1-4hr		4-8hr		>8hr		
	No.	%Age	No.	%Age	No.	%Age	No.	%Age	
C-I (N= 17)	7	41.17%	3	17.64%	1	5.88%	6	35.29%	0.001 S
C-II (N= 63)	33	52.38%	20	31.74%	7	11.11%	3	4.76%	
C-III (N= 64)	21	32.81%	35	54.68%	6	9.37%	2	3.125%	
C-IV (N=71)	29	40.84%	34	47.88%	5	7.04%	3	4.22%	
C-V (N= 72)	28	38.88%	33	45.83%	9	12.5%	2	2.77%	
C-VI (N=129)	33	25.88%	74	57.36%	14	10.85%	8	6.20%	
C-VII (N=84)	38	45.23%	32	38.095%	10	11.90%	4	4.76%	

It was observed that in C-I (Professional/Honours MA and above), Out of 17 (3.4%) mothers, 7 (41.17%) cases initiated breastfeeding in 0-1 hour, 3 (17.64%) cases in 1-4 hours, 1(5.88%) cases initiated in 4-8 hours and 6 (35.29%) initiated breastfeeding in >8 hours.

Out of 63 (12.6%) cases in C-II (BA, Bsc degree), 33(52.38%) mothers initiated breastfeeding in 0-1 hour, 20 (31.74%) cases in 1-4 hours, 7 (11.11%) cases in 4-8 hours and 3 (4.76%) initiated breastfeeding in >8 hours.

Out of 64(12.8%) mothers in C-III (Intermediate/Post high school certificate), 21 (32.81%) cases initiated breastfeeding in 0-1 hour, 35 (54.68%) cases in 1-4 hours, 6(9.37%) cases in 4-6 hours and 2(3.125%) initiated breastfeeding in >8 hours.

Out of 71 (14.2%) mothers in C-IV (High school), 29 (40.84%) cases initiated breastfeeding in 0-1 hour, 34 (47.88%) cases in 1-4 hours, 5(7.04%) cases in 4-8 hours and 3(4.22%) initiated breastfeeding in >8 hours.

Out of 72 (14.4%) mothers in C-V (Middle school completion), 28 (38.88%) cases initiated breastfeeding in 0-1 hour, 33 (45.83%) cases in 1-4 hours, 9(12.5%) cases in 4-8 hours and 2 (2.77%) initiated breastfeeding in >8 hours.

Out of 129 (25.8%) mothers in C-VI (Primary school/Illiterate), 33(25.58%) cases initiated breastfeeding in 0-1 hour, 74(57.36%) cases in 1-4 hours, 14 (10.85%)

cases in 4-8 hours and 8 (6.20%) initiated breastfeeding in >8 hours.

Out of 84(16.8%) mothers in C-VII (Illiterate), 38 (45.23%) cases initiated breastfeeding in 0-1 hour, 32 (38.095%) cases in 1-4 hours, 10 (11.90%) cases in 4-8 hours and 4 (4.76%) initiated breastfeeding in >8 hours.

The effect of mother's education on initiation of breastfeeding was found to be significant.

Table 2: comparison of initiation of breastfeeding with family income

Family Income/month (Rs)	Time of Initiation of Breastfeeding (min-hrs) (group-I & group-II)								P Value
	0-1hr		1-4hr		4-8hr		>8hr		
	No.	% Age	No.	% Age	No.	% Age	No.	% Age	
C-I (N=62)	30	48.38%	24	38.70%	5	8.06%	3	4.83%	0.144 NS
C-II (N=135)	48	35.55%	78	57.77%	7	5.18%	2	1.48%	
C-III (N= 159)	68	42.76%	75	47.16%	8	5.03%	8	5.03%	
C-IV (N=110)	38	34.54%	51	46.36%	13	11.81%	8	7.27%	
C-V (N= 20)	7	35%	11	55%	1	5%	1	5%	
C-VI (N=10)	2	20%	6	60%	1	10%	1	10%	
C-VII (N= 4)	1	25%	1	25%	1	25%	1	25%	

It was observed that out of 43 (12.4%) mothers in C-I (Rs 1975 and above), 30 (48.38%) cases initiated breastfeeding in 0-1 hour, 24 (38.70%) cases in 1-4 hours, 5(8.064%) cases in 4-8 hours and 3 (4.83%) initiated breastfeeding in >8 hours.

Out of 135 (27%) mothers in C-II (Rs 9788-19574) , 48 (35.55%) cases initiated breastfeeding in 0-1 hour, 78 (57.77%) cases in 1-4 hours, 7 (5.18%) cases in 4-8 hours and 2 (1.48%) initiated breastfeeding in >8 hours.

Out of 159 (31.8%) mothers in C-III (Rs 7323-9787) , 68 (42.76%) cases initiated breastfeeding in 0-1 hour, 75 (47.16%) cases in 1-4 hours, 8 (5.03%) cases in 4-8 hours and 8 (5.03%) initiated breastfeeding in >8 hours.

Out of 110 (22%) mothers in C-IV (Rs 4894-7322) , 38 (34.54%) cases initiated breastfeeding in 0-1 hour, 51 (46.36%) cases in 1-4 hours, 13 (11.81%) cases in 4-8 hours and 8 (7.27%) initiated breastfeeding in >8 hours.

Out of 20 (4%) mothers in C-V (Rs 2936-4893), 7(35%) cases initiated breastfeeding in 0-1 hour, 11 (55%) cases in 1-4 hours, 1 (5%) cases in 4-8 hours and 1 (5%) initiated breastfeeding in >8 hours.

Out of 10 (2%) mothers in C-VI (Rs 980-2935) , 2 (20%) cases initiated breastfeeding in 0-1 hour, 6 (60%) cases in 1-4 hours, 1 (10%) cases in 4-8 hours and 1(10%) cases in > 8 hours.

In C-VII (Rs 979),1 (25%) cases initiated breastfeeding in 0-1 hour,1(25%) cases in 1-4 hours,1(25%) cases in 4-8 hours and 1(25%) in >8 hours.

Thus showing the effect of higher family income on early initiation of breastfeeding as significant though not statistically

Discussion

Breast milk should be initiated within half hour of delivery.⁵ The delay in initiation will lead to a delay in the development of oxytocin reflexes, which are very important for the contraction of the uterus and the breast milk reflex. In our study, initiated breastfeeding within 30minutes of childbirth, which is a good practice.

Pre lacteal feeds should not be given but still the majority of mothers gives either sugar water or honey .discarding the colostrums is still practiced widely . the colostrums is rich in vitamins ,minerals ,and immunoglobulins that protects the child from infection. ⁶ Discarding the

colostrums and feeding the child with honey or sugar water makes the child vulnerable to infection. Sharma M et al have also found similar practices in the community and it is largely influenced by the relatives and the primary care providers during childbirth.⁷

Exclusive breastfeeding should be continued for 6 months.⁸ It protects the child from malnutrition, infection and helps the overall development of child. The prematurely start weaning the child, which may lead to development of infection and may have a long term effect on the physical growth of the child.⁹ The main reason given for the mother to start early weaning was insufficient milk, which may be due to the early age marriage (those who were younger than 19 years old) and early child birth. Studies indicate that adolescents breastfeed less often than adults and they hold positive and negative attitude toward breastfeeding that influence decision making and breastfeeding.¹⁰

Most of the mothers received information regarding breastfeeding from health workers and doctors. The development of counselling skills among doctors helps in conveying the right message to mothers about breastfeeding and weaning practices.¹¹

Conclusions

The study emphasizes the need for breastfeeding intervention programs especially for the mothers during antenatal and postnatal check-ups. The information regarding the advantage and duration of breastfeeding need to be provided for the community as a whole.

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