
Brief Reports

Breastfeeding and the First Breastfeeds—Correlation of Initiation Pattern to Mode of Delivery in 1279 Hospital Delivered Babies

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It is well known that the breastfeeding pattern established in the immediate neonatal period influences the longterm breastfeeding behavior(1-3). Some sociodemographic factors influence infant feeding practices(4) as also the type of delivery(5-7). The present study was aimed at finding out the prevailing practices with reference to initiation of breastfeeding and giving prelacteal feeds to babies in relation to socio-demographic factors.

Material and Methods

One thousand two hundred and

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*Received for publication: February 26,1994;
Accepted: December 5,1994*

seventy nine babies born during May 1991 and May 1992 at the Chigateri General Hospital and Bapuji Hospital, Davangere were included. The babies were term with a birth weight of above 25 kg. Sick, preterm infants, babies with congenital anomalies (for example, cleft lip, cleft palate) that could hinder nursing at the breast and twins were excluded from the study.

Each mother and baby were seen on the day, or on the following day of delivery. During this postnatal visit, information regarding the maternal age, education, parity, socio-economic status and sex of the baby were collected. The mode of delivery and the condition of the baby were also recorded. Information regarding initiation of breastfeeding, prelacteal feeds given and the number of breastfeeds given in the first 24 hours were gathered.

The doctors and nursing staff of both the hospitals discourage the administration of prelacteal feeds of any form and advise early initiation of breastfeeding. The babies were given to the mothers immediately after delivery and 'bedding-in' was practiced in all the cases studied. The relation between the various factors to the feeding practices were evaluated by Chi square test.

Results

Of the 1279 mothers studied, 382 (30%) did not give any prelacteal feeds, and 897 (70%) gave some type of prelacteal feeds. From *Table I* it is clear that the practice of giving prelacteal feeds was minimum (25%) among mothers who had normal vaginal delivery, as

compared to the other modes of delivery. The pattern of initiation of breastfeeding is depicted in *Table II*. Half the mothers who had normal vaginal delivery initiated breastfeeding within the first 4 hours whereas only 1.2% of those who underwent Cesarean section breastfed within the same time. *Table III* shows number of breastfeeds in the first 24 hours. Most of the mothers (61% to 85%) who delivered vaginally gave 4-6 breastfeeds in the first 24 hours as compared to only 11.4% of those who underwent Cesarean section. Socio-demo-

TABLE I—*Type of Delivery and Prolactal Feeding Pattern*

Mode of delivery	No.	Prolactal feeds (%)	
		Yes	No
Normal vaginal delivery	161	25	75
Forceps extraction	118	78	22
Vaginal with episiotomy	500	60	40
Cesarean section	500	93	7
Total	1279	70	30

$\chi^2=511.726$; $p < 0.001$.

TABLE II—*Mode of Delivery and Initiation of Breastfeeding*

Initiation (h)	Mode of delivery				Total
	NVD	FOR	EPIS	LSCS	
0- 4	86	28	173	6	293
4-12	57	68	274	110	509
12-24	9	12	26	184	231
24-48	9	10	27	200	246
Total	161	118	500	500	1279

$\chi^2=621.904$; $P < 0.001$.

TABLE III—*Mode of Delivery and Frequency of Breastfeeding in First 24 Hours*

Number of feeds	Mode of Delivery				Total
	NVD	FOR	EPIS	LSCS	
None	9	10	27	200	246
1-2 feeds	15	36	124	243	418
4-6 feeds	137	72	349	57	615
Total	161	118	500	500	1279

$\chi^2=498.893$; $P < 0.001$.

NVD—Normal vaginal delivery, FOR—Forceps delivery, EPIS—Episiotomy, LSCS—Lower segment cesarean section.

graphic factors like maternal age, socio-economic status, literacy, parity and sex of the baby did not influence the breastfeeding practices like administration of prelacteal feeds, initiation of the first breastfeed and the number of breastfeeds given in the first 24 hours.

Discussion

This study showed that the type of delivery had a significant effect over the breastfeeding patterns established in the hospital. The frequency of giving prelacteal feeds was the least among mothers who had a normal vaginal delivery (25%), and maximum among those who underwent Cesarean section (93%). Mothers who underwent forceps extraction or vaginal delivery with episiotomy also had a higher frequency of giving prelacteal feeds. This phenomenon can be explained by the fact that lesser the trauma inflicted on the mother during childbirth, the faster she recovers and sooner is the initiation of breastfeeding. This by itself avoids the administration of prelacteal feeds.

Other studies from this country show varying patterns of giving prelacteal feeds. One study found the frequency to be 51%(8) whereas other studies have reported a higher prevalence of 85-90%(9,10). However, these studies have shown the general prevalence, and do not categorize the prelacteal feeding pattern according to the type of delivery.

Mothers who had normal vaginal delivery were more successful in initiating breastfeeding within the first 4 hours. Fewer of mothers who had episiotomy or forceps extraction started breastfeeding within the first 4 hours, and only 1.2% of mothers who underwent Cesare-

an section breastfed in the same time. In other studies from this country, only 10% of mothers breastfed within 6 hours(11) and the majority (68%) started breastfeeding only after 24 hours(8). In another hospital based study(12) from Delhi on infants delivered by Cesarean section, 40% were breastfed within 4 hours of birth, 33% within 4-8 hours, 11% within 9-12 hours and 16% after 12 hours of birth. Studies done abroad indicate that the majority of babies delivered by Cesarean section received their first breastfeed only after 12 hours(6-13).

From this study it was seen that more number (61-85%) of mothers who delivered vaginally gave 4-6 breastfeeds in the first day, as compared to only 11.4% of Cesarean section mothers. In another study on mothers who had uncomplicated vaginal delivery, the mothers nursed their neonates on an average 4.3 ± 2.5 (SD) times during the first 24 hours(14). The practice of giving prelacteal feeds, and delayed initiation of the first breastfeed among babies delivered by Cesarean section could be contributory to this trend of less number of breastfeeds on the first day after birth.

Our results indicate that socio-demographic factors like age of mother, parity, sex of baby, socioeconomic status and maternal educational status did not influence the breastfeeding pattern in babies delivered in the hospital. Only the mode of delivery had a significant effect on the breastfeeding pattern. Those mothers having undergone traumatic deliveries, especially after Cesarean section, gave prelacteal feeds more often, delayed the administration of the first breastfeed and gave less number of breastfeeds in the first 24 hours. The

need for educating and motivating such mothers is obvious.

Acknowledgement

We thank all the members of Davangere Pediatric Research Foundation for their help.

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