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Practice of Early Initiation of Breastfeeding among Postnatal Mothers in Modern Government Maternity Hospital, Hyderabad

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Abstract: ***Background: Initiation of breast feeding within 1 hour of delivery is a proven high-impact intervention for neonatal survival. But the practice of this in many parts of the India is far beyond the optimal period of initiation. Hence, we planned to access the time of initiation of breastfeeding and the factors associated with early initiation of breast feeding among postnatal mothers in Modern Government Maternity Hospital. Objective: Study was conducted to determine the time to initiation of breastfeeding in the postnatal ward of MGMH. Materials and Methods: This observational study was conducted from November 2017 to January2018 among the mothers in the postnatal ward of Modern Government Maternity Hospital. Data were collected using a structured interview. Results: A total of 300 mothers were studied. 60 (2.3%) mothers gave prelacteal feeds to their newborns. Of the 300 mothers, only 37(12.3%) initiated breastfeeding within 1 hr of delivery. Majority of the mothers from urban areas did not receive advice on breastfeeding during antenatal visits. Conclusion: Even though breast feeding practices and feeding of colostrum were good in this study, the practice of early initiation was extremely low. The support system prevailing in the hospital was also unsatisfactory due to inadequate staff. These observations will help in planning strategies for the promotion of early breastfeeding to reduce neonatal morbidity and mortality in the community.***

Keywords: Neonatal survival, Breastfeeding, Early initiation, Colostrums

1. Introduction

Globally, the majority of child and young adolescent deaths occur at the youngest ages. Eighty-five per cent (5.4 million) of the 6.3 million deaths in 2017 occurred in the first five years of life and about half (47 %) of the under-five deaths in 2017 occurred in the first month of life(1). In India, 1.2 million children aged 0–59 months die yearly. An estimated 58% of these deaths occur during the neonatal period (i.e, the first 28 days of life)(2). A meta -analysis of three large trials conducted in Ghana, India and Nepal found that early initiation of breast feeding was associated with a 44% lower risk of neonatal mortality (RR 0.56; 95% CI 0.40 to 0.79)(3)(4)(5)(6). Therefore, supporting mothers to initiate breast feeding within 1 hour of delivery is a proven high-impact intervention for neonatal survival (7) (8). India's National Family Health Survey 2015 shows that, in states such as Andhra Pradesh and Telangana, where 92% of deliveries are attended by skilled health providers, high prevalence of births by caesarean section (40% in Andhra Pradesh and 58% in Telangana) are associated with low rates of early initiation of breast feeding (37% in Telangana and 40% in Andhra Pradesh). However, global evidence suggests that, in the presence of adequate support, a caesarean section is not necessarily a barrier to timely initiation of breast feeding (9). However, these data also indicate that rates of early initiation of breast feeding could almost double if all newborns delivered by a health provider were breast feed within 1 hour of birth.

2. Materials and Methods

This observational study was conducted from November 2017 to January 2018 among the mothers who delivered in the postnatal ward of Modern Government Maternity Hospital attached to Osmania Medical College, Hyderabad. Being a referral hospital for the Telangana state, it records approximately 1500–1600 deliveries in a month. The calculated sample size was 300 and the mothers who were sick or had lost their babies, or whose babies were very sick and those who were not willing to participate were excluded from the study. Prior ethics committee approval was taken and informed consent regarding participation in the study was obtained in the regional language. The mothers were interviewed using a semi structured interview schedule.

Statistical analysis: Determinants of early initiation were analyzed using chi-square test, statistics were applied to find out P value in variables. P value of <0.05 was considered to be statistically significant for any given measure.

3. Results

Three hundred women, fulfilling the study criteria, were enrolled during the study. Their age ranged 17- 41 years. Majority of these women were primiparous (n = 131, 43.7%) and had secondary level of education (n =163, 54.3%). Among the mothers, 61 (20.3%) were illiterate. Majority Of the mothers, 204 (68%) were from urban areas and majority of them 151(50.3%) were Muslims. Majority of the mothers 263 (87.7%) initiated breastfeeding after the recommended 1 hour. Only 37 (12.3%) women initiated within 1 h. 60(20%) mothers gave prelacteal feeds to their newborns. Most mothers (n = 81, 74.5%) cited delay in rooming in as a major

reason for prelacteal feeds. Majority of the mothers 245 (81.7%) expressed that they were not told about time of initiation of breastfeeding during their antenatal visit. Most mothers from urban areas 115 (56.4%) expressed that breastfeeding was not discussed during their antenatal visits. Among the study group 298 (99.3%) were aware of importance of breast feeding, but only 151 (51%) were aware of importance of colostrum.

Table I

Characteristics			
variables	Timing of Initiation of Breast Feeding	Column 1	Column 2
1. Maternal age	>1hr	>1hr	
<20y	5 (8.9)	51(91.1)	56
21-35y	31(12.8)	21(87.2)	242
>35y	1(50)	1(50)	2
x2=3.2756, P- value=0.194403, NS			
2) Education			
none	2(3.3)	59(96.7)	61
primary	2(6.2)	30(93.8)	32
secondary	17(10.4)	146(89.6)	163
higher	16(36.4)	28(63.6)	44
X^2=29.7666, P- value= 0.00001, S			
3) Religion			
Hindu	28(18.8)	121 81.2)	149
Muslim	9(6)	142(94)	151
X^2=11.4207, P- value= 0.000726, S			
4) Parity			
Primi	16(12.2)	115(87.8)	131
2^{nd}	17(14.4)	101 (85.6)	118
$\geq 3^{rd}$	4(7.8)	47(92.2)	51
X^2=1.4219, P- value=0.491168, N S			
5) Mode of delivery			
C/S	15(8.30	165(91.7)	180
Veginal	22(18.3)	98(81.7)	120
X^2=6.6591, P- value=0.0098065, N S			
6) Residence			
Rural	20(20.8)	76(79.2)	96
Urban	17(8.3)	187(91.7)	204
X^2=9.4338, P- value=0.00213, N S			
7) weight of the baby			
<1.5kgs	6(46.2)	7(53.8)	13
1.5-2.5kgs	7(7.1)	91(92.9)	98
>2.5kgs	24(12.7)	165(87.3)	189
X^2=16.2179, P- value=0.000301, S			
8) sex of the baby			
Mch	19(12.4)	134(87.6)	153
fch	18(12.20	129(87.8)	147
X^2=, P- value=, S			
9) gestational age			
pre term	6	41	47
term	29	200	
post term	2	22	24
X^2=0.3864, P = 0.824312, NS			

Table II: Practices of breast feeding among the post natal mothers

Prelacteal feeding	no.
yes	60(20)
no	240(80)
Initiation of breast feeding	
<1 hr	37 (12.3)
>1 hr	263(87.7)

4. Discussion

In this study, only 37 (12.2%) mothers initiated breastfeeding within 1 hr. Compared to this finding, early breastfeeding rates in the state of Tamil Nadu and the national averages are 58.8% and 40.5%, respectively[10, 11]. A study conducted in a tertiary care hospital showed that 32.6% of mothers initiated breastfeeding within 1 h of delivery.[12] A study conducted by Kulkarni showed that 70.2% of mothers practiced early breastfeeding.[13] Another study conducted in South India also showed similar findings, with 28% of mothers initiating breastfeeding within 1 hr.[14] These very low percentage of the practice, which has a significant impact on neonatal mortality, is a matter of concern. In the present study delay in rooming in (38.4%) and lack of awareness about time of initiation of breast feeding (33.8%) were cited to be the main reason for delay in initiation of breast feeding after child birth. Reports from the Postgraduate Institute of Medical Education and Research, Chandigarh, observed the rates to be 64% and attributed late initiation to be due to cesarean sections.[15] A tertiary center form Gujarat reported 32.4%, with maternal fatigue and cesarean section to be common factors seen in late initiating of breastfeeding.[16]. Having less patient to nursing staff ratio in the current scenario against the national norms of 1:1 or 1:2 in labour ward leads to delay in rooming in and also results in inadequate support for Early initiation of breast feeding [17]. However, shortage of staff and the time taken for the completion of procedures, Post birth activities led to delay in shifting to indoor wards and cultural taboos were found to delay in breastfeeding initiation, which in turn increases the prelactal feeding [16, 18]. A study of 175 postnatal mothers in Vadodara, Gujarat, reported similar factors which led to delay in initiation of feeding and the increased use of prelacteal feeds. [16].

Almost all the mothers 299(98.7%) breastfeed on demand, which was a good practice. But only 153(51 %) were aware of importance of colostrums and 245 (81.7%) were not aware about time of initiation of breast feeding. In this study 133(44.3%) mothers gave the response that breastfeeding was not discussed during antenatal visits. When compared with rural areas mothers from urban areas have not received proper antenatal counseling regarding breast feeding. A study conducted in Nepal, none of the mothers received breastfeeding advice during antenatal visits [19]. However, another study conducted in a baby-friendly teaching hospital showed that 84.0% of the mothers were told about the techniques of breastfeeding.[20]

- Variables like mother age, education, gestation affected favorably. Religion, poor quality of antenatal counseling, less man power in hospital affected adversely. Baby sex, parity, mode of delivery not affected significantly.
- Adoption of various strategies such as provision of early rooming in, immediate skin to skin contact, and breastfeeding support given to the mother could mount up Early initiation of breast feeding. [21, 22].

5. Conclusion

The present study shows the lower rates of initiation of breastfeeding within 1 hr after delivery. More work load,

less number of staff is the main factor responsible for this. Improving the staff– patient ratios in labor wards, the change in policy to initiate immediate skin to skin contact, and rooming in might help improve the Early initiation of breast feeding. Antenatal counseling about the importance of Early initiation of breast feeding will be helpful. In this regards we can use social media also. Appointing lactational counselors, allowing birth companion will be another alternatives. These observations will help in planning strategies for the promotion of breastfeeding practices to further reduce neonatal morbidity and mortality in the community.

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6. Conflicts of interest

There are no conflicts of interest

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