



Role of Breast-Feeding in Postnatal Women

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Authors' contributions

The sole author designed, analysed, interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i44A32636

Editor(s):

(1) Dr. Ana Cláudia Coelho, University of Trás-os-Montes and Alto Douro, Portugal.

Reviewers:

(1) Atmajit Singh Dhillon, Maharishi Markandeshwar Institute of Medical Sciences and Research (MMIMSR), India.

(2) Kondareddy Radhika, SDUMC, India.

Complete Peer review History: <https://www.sdiarticle4.com/review-history/73609>

Original Research Article

Received 09 July 2021

Accepted 19 September 2021

Published 20 September 2021

ABSTRACT

To assess the attitude of breastfeeding in postnatal women. Breastfeeding is essential for the health and development of the child. It is protective against gastrointestinal and respiratory infections of the baby. Early initiation of breastfeeding, exclusive breastfeeding and introduction of complementary food in conjunction with continued breastfeeding is necessary for the sensory and cognitive development of the child. Even though the prevalence of breastfeeding is high, certain undesirable cultural practices delay initiation of breastmilk and colostrum. World Health Organization recommends the practice of exclusive breast feeding for infants up to 6 months of age and continue breast feeding up to 2 years along with weaning foods. Hence this study was conducted to follow up the breastfeeding practices of postnatal mothers and regarding its initiation and duration of exclusive breastfeeding in Sri Lakshmi Narayana Institute of Medical Sciences.

Keywords: postnatal; breastfeeding; breast milk and colostrums.

1. OBJECTIVE OF STUDY

- Introduction. Breastfeeding has been viewed as the healthiest approach of feeding.
- Approaches to support the initiation of breast feeding in the postnatal period.
- The continuation of breastfeeding in the first six months. It was found that one of the major factors influencing Breast feedings.

- The role of the midwife/ nurse in facilitating breastfeeding. It is health care professionals'.

2. INTRODUCTION

In developed countries, women who are of high-income status and are college-educated tend to have the highest breastfeeding rate, while young mothers from low socioeconomic educations with low instructive levels have the lowest breastfeeding rate. However, in developing countries, breastfeeding is inversely related to socioeconomic status (SES) as per the studies by Beaudry et al and Dennis [1-3]. According to the Mannan and Islam study in Bangladesh, mothers belonging to lower socioeconomic groups and having a more traditional life-style breastfeed their babies more and for a longer period than more affluent mothers. Similarly Truong et al in Vietnam, stated in his study that children from wealthier households are breastfed for shorter duration than those from poorer households, in both urban and rural areas [4-6].

Iskandar et al showed that the median duration for children from low and high household economic levels are 22.3 months and 17.5 months respectively in urban Java- Bali, however, it is only a marginal difference in rural area and in urban Outer Islands 1, they are 16.5 months and 15.3 months respectively whereas it is reverse in rural outer Islands [7]. The neonates' health condition is assessed by adequate weight gain, reflexes and developmental milestones and development of any illness like acute diarrhoeal disease or acute respiratory tract infection. Initially for 3 to 4 days after birth, there will be a physiological loss of 10% of birthweight. This later starts increasing steadily. In early infancy, rapid weight gain can occur physiologically, with the birthweight doubling in the first 4 to 6 months. It might therefore be a critical period for the development of obesity. The rooting reflex when the mother holds the baby and her breast touches the baby's upper lip, cheek or the side of the mouth, the baby opens his or her mouth and explorations for the nipple with an open mouth Suckling reflex [8-9].

After proper positioning the baby's cheek is touched and that will make the baby open her mouth (rooting reflex). Allow the baby to have a wide open mouth and the baby should be quickly brought onto the breast ensuring that the nipple and most of the areola is within the baby's

mouth. It is important that the baby is brought on the mother rather than the mother leaning onto the baby [10].

Crossed extension when the foot is stroked while the leg is held extended at knee, there is rapid flexion, adduction and then extension of the opposite leg. This reflex appears at 32 weeks. The adduction component appears after 36 weeks of gestation. Tonic neck reflex. The supine infant's head is turned suddenly to one side. The arm and leg on the same side extend, while the opposite limbs go into flexion. The reflex is prominent between second and fourth months. Persistence of the reflex beyond the age of 6 to 9 months or a constant tonic neck posture are abnormal and usually indicate spastic cerebral palsy [11]. This was further proved by which when compared with no breast-feeding, full breast-feeding infants had lower odds ratio of diarrhoea, cough or wheeze, and vomiting and lower mean ratios of illness months and sick baby medical visits and minimal breast-feeding was not protective [12].

3. MATERIALS AND METHODS

Study Period: December 2015 – August 2017.

Study Place: Patients in Sri Lakshmi Narayana Institute of Medical Sciences.

Number Of Subjects Studied: 500 postnatal women.

Inclusion Criteria

Postnatal women

Age: 22-37

3.1 Methodology

All women who meet the inclusion criteria was taken into the study after explaining them about the study. The subjects will be explained about the benefits and significance of EBF and followed up subsequently at 11 days, 9weeks, 12weeks and 10 months postpartum to study the time of initiation of breastfeeding, duration of exclusive breastfeeding, follow up breastfeeding practices and to study the reasons if it was discontinued before 6 months. The baby's condition will also be assessed by considering any diarrhoeal or respiratory tract infection symptom if present, achievement of developmental milestones, and weight at each visit. The results will be tabulated.

Data will be statistically analyzed and results will be discussed at the end of the study.

value (p value) of less than 0.05 was considered to be statistically significant.

3.2 Data Collection

Data was collected in predesigned questionnaire. Questions were asked to mothers as per the questionnaire in their own language and documented in English. The questionnaire contains certain particulars of the mother like age, education, occupation, socioeconomic status, parity, number of antenatal visits, antenatal period, delivery details, their knowledge and attitude towards breastfeeding and their breastfeeding practices. There was good response. The baby's condition was assessed at birth and at each visit (11 days, 9weeks, 12weeks and 10 months postpartum) by considering weight, developmental milestones and presence of symptoms of acute diarrhoeal disease or acute respiratory tract infection. Based on the response obtained, postnatal women were categorised into exclusive and non-exclusive breastfeeding groups. A probability

4. RESULTS

Table 1. Age of respondents

Age	No.	Percentage (%)
22-37 years	320	62.8
37-40 years	100	20.2
41-45 years	80	17
Total	500	100%

Table 1 shows that respondents from age 22 -27 years were the majority with 334 (66.8%) followed by 26 -30years with 106 (21.2%) and lastly 31 -35years with 60 (12%) mothers.

Table 2 shows that out of 476 (95.2%) mothers who were booked, 39.9% had 2 -4 antenatal visits, 42% had 5 -7 visits and 18.1% had above 7 visits. While among the 24 (4.8%) unbooked respondents, none had any antenatal visits.

Table 2. Booking status and number of antenatal visits of the respondents

Antenatal visits	Mothers booked (n=476)		Mothers not booked (n=24)	
	No.	Percentage (%)	No.	Percentage (%)
None	-	-	24	100
2-4	190	39.9	-	-
5-7	200	42.0	-	-
Above 7	86	18.1	-	-

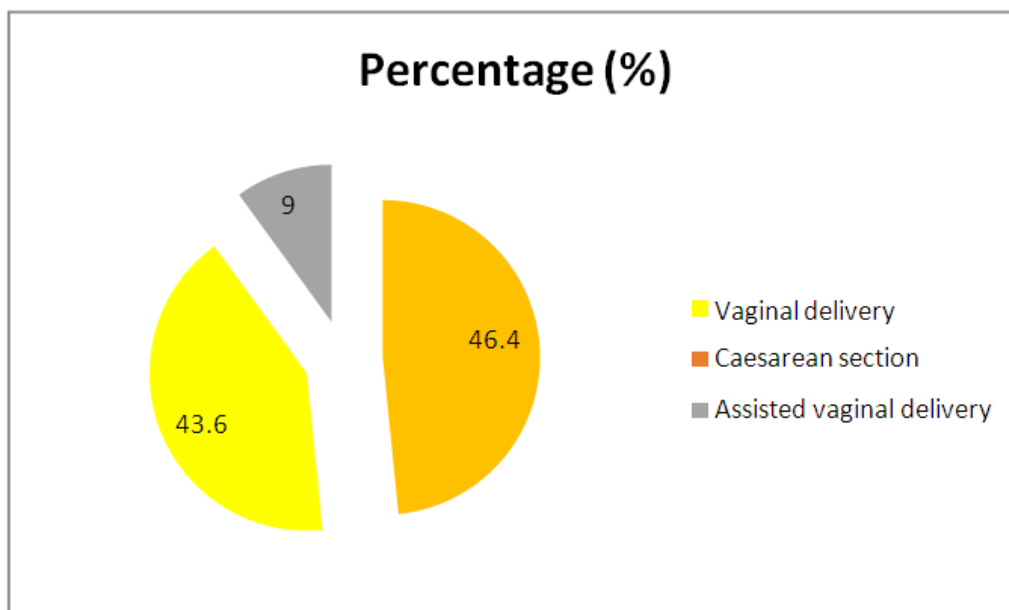


Fig. 1. Perinatal factors of respondents

Table 3. Knowledge towards breastfeeding

Factor	No.	% of women answered correctly
1.Time of initiation of breastfeeding	a)After normal delivery b) After caesarean section	71 65
2.Colostrum feeding		52
3.Prelacteal feeds		34
4.Water during first 6 months		45
5.Adequacy of breastfeeding		75
6.Knowledge about demand feeds		95
7.Duration of breastfeeding	of exclusive	457 91.4
8.Knowledge of breastmilk	on expressed	160 32
9.Technique of breastmilk	of expressing	151 30.2
10.Storage of expressed breastmilk in room temperature		25 5
11.Knows benefits of breastfeeding	To baby To mother	500 395 100 79
12.Ideal position for breastfeeding		436 87.2
13.Informs doctors about lactation status before obtaining prescription for drugs		491 98.2
14.Continuation of breastfeeding	when	
a) mother is sick		262 52.4
b) mother is menstruating		452 90.4
c) baby has fever/cold		411 82.2
d) baby has diarrhoea		320 64
e) baby has vomiting		255 51

71% of post natal women answered that breast feeding should be given within 1 hour of normal delivery. 65% of post natal women answered that breast feeding should be given within 4 hours of caesarean section. Only 52% women said that colostrum should be given. Only 34% post natal women think that prelacteal feeds should not be given. 45% of women think that water should not be given to the baby. 95% mothers have knowledge regarding demand feeds. 91.4% of the subjects said that exclusive breast feeding

should be done for 6 months. Only 32% know about expressed breast milk. 5% of the subjects have answered correctly regarding storage of expressed breast milk. 41% post natal mothers don't know that breast feeding benefits mothers also 52.4% of the study population said that breast feeding should be stopped if the mother is sick. 36% of study population said that breast feeding should be stopped if the baby is having diarrhoea and 49% said that lactation should be stopped if the baby is having vomiting.

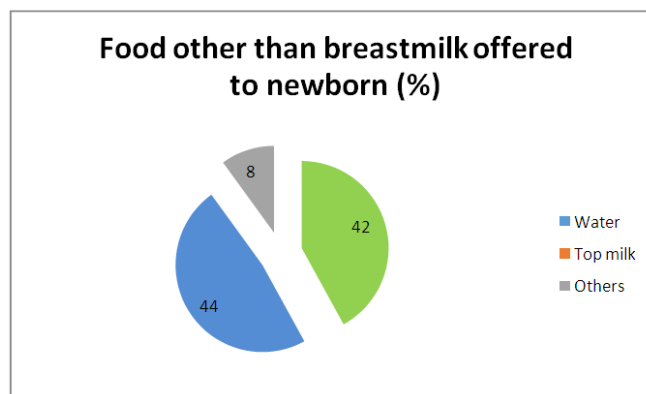


Fig. 2. Supplementary feeds (n=293) 58.6% (before 6 months)

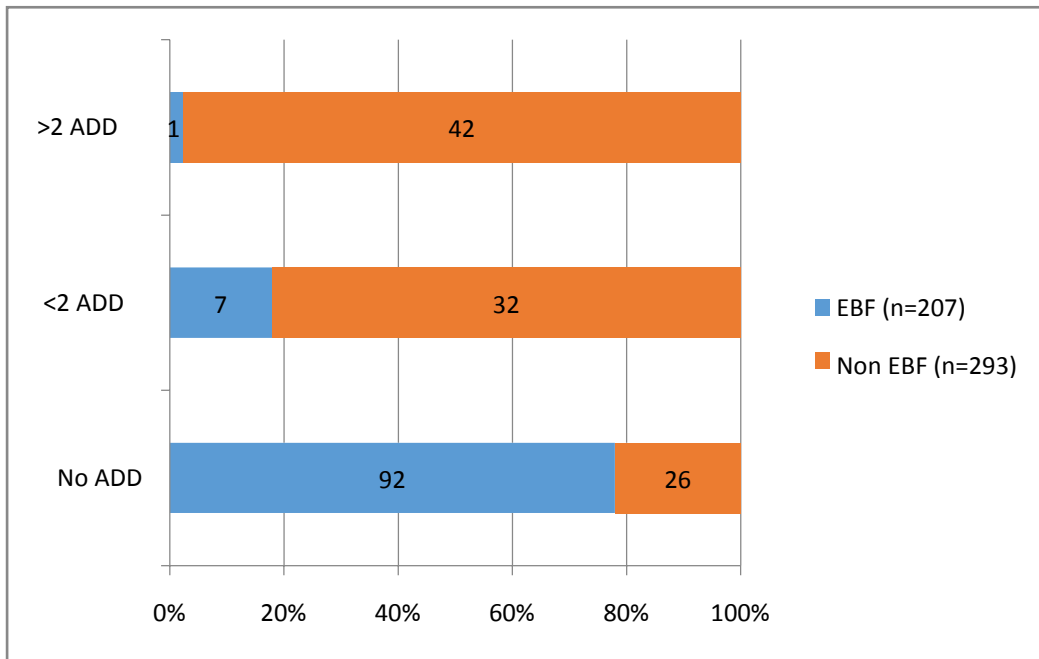


Fig. 3. Episodes of acute diarrhoeal disease (ADD)

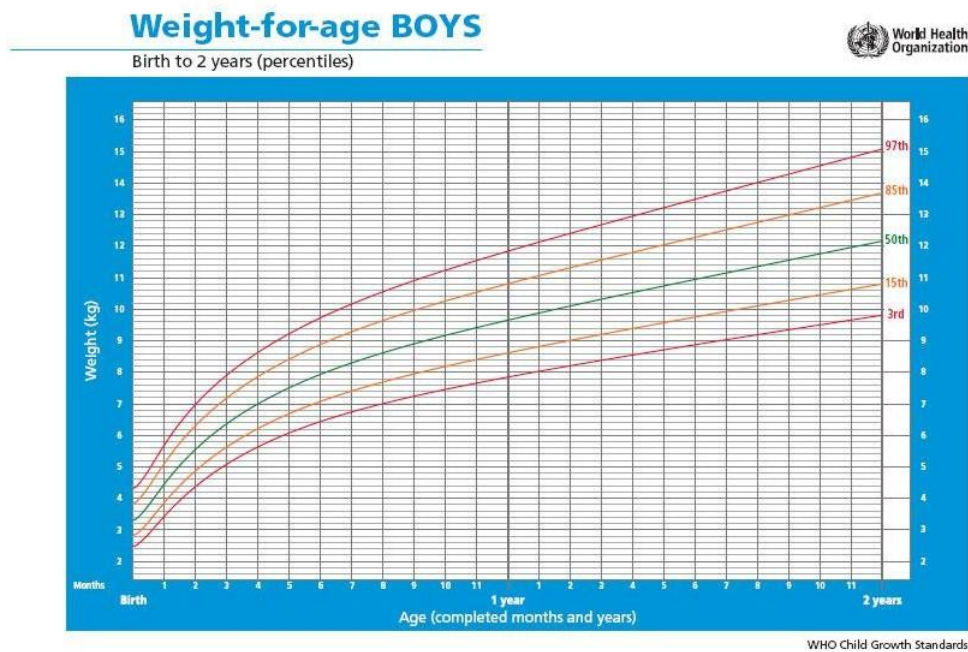


Fig. 4. Weight for age for boys : Birth to 2 YRS

5. DISCUSSION

From the results accrued from age 22 -27 years were the majority with 69.8% followed by 28 - 32years with 23.2% and lastly 33 -37years with 12%. Out of 500 mothers a majority of 44.4% did high school, 22.8% did higher secondary school,

18.6% graduated from college, 11.2% did primary education, and 3% were illiterate. Working women comprised of 28% and 72% women were home-makers. Regarding socioeconomic class, 39.6% were from lower middle class contributing the majority, 23% from upper lower class, 19.4% in lower class group, 13.6% belong to upper middle class, and 4.4%

women belong to upper class. WHO recommends 6 months of exclusive breastfeeding for infants. In our study 91.4% of the mothers knew that exclusive breastfeeding should be given for 6 months. This is much better when compared to the rate of 38% obtained in studies done by Maseer Khan et al in Hyderabad in 2012 [13] and Maheswari et al in 2010 [14].

However in our study it was seen that the knowledge of expressed breastmilk (32%) and it's technique (30.2%) was very low. Therefore in urban areas with decreasing proportion of working mothers, it is essential to educate them about expressed breast milk. (Lindsey Murtagh, et al., 2011) This study was done to evaluate the breastfeeding practices of mothers, in regards to the time of initiation of breastfeeding and duration of exclusive breastfeeding in postnatal mothers and reasons if it was discontinued before 6 months after it should be elevated. This study population comprised mothers in the age group 20 years to 35 years out of which 66.8% were in the age group 20 to 25 years, followed by mothers in the age group 26 to 30 years who comprised of 21.2% and 12% mothers who were more than 30 years. Among these mothers, 3% were illiterate, 11.2% have completed their primary schooling, 44.4% have completed high school, 22.8% Higher secondary schooling and 18.6% have completed college level of education. Out of them only 28% were working mothers and the remaining 72% were home makers. Almost 95.2% of them were booked and 60.1% had more than 4 antenatal visits. In this study population 39.6% were in lower middle class status followed by 23% in upper lower class, 13.6% in upper middle class and 19.4.

This when compared with the Nation's rate of initiation of breastfeeding in less than 1 hour of 23.4% [8], is far below the rate obtained in our study. Similarly, studies by Galhotra et al [15], Sriram et al [16] and Maheswari et al [15] showed rates of 69.1%, 54.67% and 36% which are also low compared to our study. Initiation will lead to a delayed development of oxytocin reflexes, which are necessary for the contraction of the uterus and the breast milk reflex. Studies comparing the early onset of breastfeeding on the development of newborns and on their mothers and those studies in which breastfeeding had begun on the 6 th hour after birth show that the earlier the breastfeeding begins, the earlier and more effective the consolidation of the process and therefore a better impact on the after-birth period occurs,

which helps in the earlier initiation of the secretion of breast milk [17,18].

The practice of pre-lacteal feeding delays initiation of breast feeding. Pre-lacteal feeding forms a vicious cycle with 'coming in' of milk; it first delays initiation, which later encourages prelacteal feeding [19]. The proportion of infants who mastered the developmental milestones increased with duration and exclusivity of breastfeeding [13]. Infants who had never been breastfed were 50% more likely to have gross motor coordination delays than infants who had been breastfed exclusively for at least 4 months (10.7% versus 7.3%). Any breast milk also was positively related to development: infants who had never been breastfed were 30% more likely to have gross motor delays than infants who were given some breast milk for up to 2 months (10.7% versus 8.4%). Infants who were never breastfed had at least a 40% greater likelihood of fine motor delay than infants who were given breast milk for a prolonged period [20]. Thus, the results regarding developmental milestones show that exclusively breastfed infants had better developmental milestones as compared to non exclusively breastfed infants.

5. CONCLUSION

The key to successful spreading of awareness regarding breastfeeding is by adopting "Right Information, Adequate Education & Effective Communication" strategies aimed at mothers from antenatal period onwards. To stress the gravity of exclusive breastfeeding as a basic health issue rather than opting it as a lifestyle choice especially for working women.

CONSENT AND ETHICAL APPROVAL

Ethical approval and permission was obtained from ethical committee members. The purpose of the study was explained to the mothers before they were requested to participate in the study. Obtained written informed consent from patient's and preserved by author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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