Abbreviated Key Title: Sch J App Med Sci ISSN 2347-954X (Print) | ISSN 2320-6691 (Online) Journal homepage: www.saspublishers.com

Obstetrics & Gynaecology

Early Breast Feeding, Healthy Baby...Factors Influencing the Breast Feeding in a Tertiary Care Hospital

Dr. Pathri Manjula, Dr. Jalagam Madhavi*

Assistant professor, department of Obstetrics and Gynaecology, Kakatiya Medical College, Warangal, Telangana, India

*Corresponding author: Dr. Jalagam Madhavi **DOI:** 10.36347/sjams.2019.v07i03.021

 $|\ \textbf{Received:}\ 25.02.2019\ |\ \textbf{Accepted:}\ 06.03.2019\ |\ \textbf{Published:}\ 30.03.2019$

-

Abstract

Original Research Article

Exclusive breastfeeding up to six months is considered to be beneficial for the health and wellbeing of infants and mothers. It is believed that breast-feeding is universally and traditionally practiced in India. The best gift a mother can give to infant is breastfeeding. This descriptive study was conducted at a tertiary hospital in Warangal, Telangana state, India. Every third trimester mothers admitted in the maternity ward with a minimum of three antenatal visits were included in the study. These 200 mothers were administered a pre-tested semi structured questionnaire on breastfeeding in the local language, Telugu, within 24 hours of giving birth, 3months and 6 months. The mean age of the mothers was 24.7 ±5.62 years. The age group less than 20 years consist of about 22%. About one third of mothers did not have any formal education (35%), and first-time mothers were (34%), one third of mothers did not have any formal education (35%), and first-time mothers were (34%) and 52% were from low socio-economic status. About 85% lived in nuclear families, 42% had normal delivery and 95% delivered in health institutions. Only 28.5 % newborns were breast fed within 1 hr of birth. 67.5% of newborns were put on breast milk in later hrs of the same day and 4% were fed after one day. Here 56% of newborns received prelacteal feed. Exclusive breast feeding up to six months were noticed in 24.5%, 52.5% up to 4 months, 33% up to 3 months respectively. Majority of mothers (46%) felt that milk is not sufficient enough to satisfy their child. About 7% mothers were found who has delivered twins, in which 4% exclusively breastfed onlyup to 4 month and other 3% breast-fed only up to 1 month. Total 34% mothers were found working out of which 11% mothers did exclusive breastfeeding up to 6 months. Most of mothers were not followed proper birth spacing. About 62% mothers were conceived within one year, in which 35% breast-fed up to 6 months. Breast feeding techniques were shown to 61% of mothers in hospitals and 34% of mothers was told about the benefit and management of breast feeding. The key to successful breastfeeding is Information, Education and Communication strategies aimed at behaviour change in Indian women.

Keywords: Breast feeding, Infants, Factors affecting, Pregnant women.

Copyright © 2019: This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

Introduction

Breastfeeding is the standard way of feeding all infants. It is now well established that breastfeeding is universal in India – both in urban and rural areas – and continues into early childhood years; and plays an important role in the context of child health [1-3]. Only 37–39% of infants in Low and Middle Income Countries are breastfeeding exclusively [4, 5]. Colostrum contains immunoglobulins, lactoferrin and lysozyme which may help reduce and protect against neonatal septicaemia, diarrhoea, and acute respiratory infections, thus reducing infant mortality rates [6].

Several cultural practices are associated with lactation and breastfeeding in India, mainly revolving around the concept of ritual purity and 'hot and cold' foods, food avoidance, restricted diet after childbirth, and remaining in seclusion for a certain time period because of the polluting effects of childbirth. However, in reality many mothers are unable to practice exclusive breastfeeding as advocated. Lack of confidence in mothers' ability to breastfeed, problems with the infant latching or suckling, breast pain or soreness, perceptions of insufficient milk supply, and a lack of individualized encouragement from their clinicians in the early post discharge period are some of the common reasons for early breastfeeding discontinuation.

Child survival is an ongoing public health priority in the South Asia region, which includes eight countries -Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri-Lanka [7]. Early or timely initiation of breastfeeding, specifically within 1 h of birth, refers to the best practice recommendation by the World Health Organization (WHO)[8].

The present study was conducted to know Breast feeding practices including time of initiation, giving colostrums, prelacteal feeds and Exclusive Breast feeding among infants and to evaluate prevalent practices and the current status of knowledge regarding breast feeding amongst mothers of children aging between 0-2 year and to identify factors influencing breast feeding.

MATERIALS AND METHODS

This descriptive study was conducted at a tertiary hospital in Warangal, Telangana state, India. Every third

trimester mothers admitted in the maternity ward from January 2018 to December 2018 was recruited. Among these mothers, 400 who had a minimum of three antenatal visits were included in the study. These mothers were administered a pre-tested semi structured questionnaire on breastfeeding in the local language, Telugu, within 24 hours of giving birth, 3months and 6 months. The terms and definitions for Infant and Young Child Feeding Practices were according to National Guidelines on Infant and Young Child Feeding.

Table 1: Factors effecting breast feeding

S.N0	Parameter	% of mothers
1	Mean age of the mothers (SD)	24.7±5.62 years
2	Socio Economic Status	21.7±3.02 years
	Low	52%
	Moderate	38%
	High	10%
3	Family type	10 /0
3	Nuclear type	85%
	Joint Joint	15%
4	Education	1370
4	No formal education	650/
		65%
_	education	35%
5	Working status of mother	240/
	Yes	34%
	No	66%
6	Age of mother	
	Below 20 years	22%
	20 years and above	78%
7	Parity	
	primi	34%
	Multi	66%
8	Birth spacing	
	Below 2 years	78%
	2 years and above	22%
9	Mode of delivery	
	Vaginal/Normal	42%
	Cesarean/Instrument	58%
10	Place of birth	
	Hospital	95%
	Home	5%
11	season of birth	
	Rainy/winter	76%
	summer	24%
12	Previous abortion	
	Yes	17%
	No	83%
13	Birth weight of child	
	Low	38%
	Normal	62%
14	Gender of child	
	Male	52%
	Female	48%
15	Twinning	-10 /0
1.5	Yes	7%
	No	93%
	110	7370

We determined exclusive breastfeeding status since birth using prospective assessment of

breastfeeding status obtained during the follow-up visits. The independent variables of interest include

maternal age (\leq 20, > 20), maternal education (yes, no),working status of mother(yes, no) gravid (primi, multi), season of birth (rainy,winter and summer), place of birth(home, hospital), history of abortion (yes, no), mode of delivery (caesarian, vaginal) number of children (< 2, \geq 2), type of family members (joint/nuclear), socio-economic status (low, middle, high), twinnig, birthweight of the infant(low, normal), gender of the child (male, female) were included in this study. The values are expressed in percentages.

RESULTS

Pregnant women enrolled, were followed up at birth, one month, three month and six month, respectively. The mean age of the mothers was 24.7 ±5.62 years. The age group less than 20 years consist of about 22%. About one third of mothers did not have any formal education (35%), and first-time mothers were (34%) and 52% were from low socio-economic status. About 85% lived in nuclear families, 42% had normal delivery and 95% delivered in health institutions. The factors effecting breast feeding shown in table 1.

Globally, over one million newborn infants could be saved each year by initiating breastfeeding within the first hour of life. Only 28.5 % newborns were breast fed within 1 hr of birth. 67.5% of newborns were put on breast milk in later hrs of the same day and 4% were fed after one day. Here 56% of newborns received prelacteal feed. Exclusive breast feeding up to six months were noticed in 24.5%, 52.5% up to 4 months, 33% up to 3 months respectively. 35 % mother said that correct age up to which they should breast feed their child is 2 year which is correct age. All mothers said that breast milk is better than commercially available infant formula milk because it is cheap and covered. Only 42 % mothers said that it protects against common respiratory diseases and diarrhoeas and 6% mothers stated about its contraceptive property. Majority of mothers (46%) felt that milk is not sufficient enough to satisfy their child. About 7% mothers were found who has delivered twins, in which 4% exclusively breastfed only up to 4 month and other 3% breast-fed only upto 1 month. Total 34% mothers were found working out of which 11% mothers did exclusive breastfeeding up to 6 months. Most of mothers were not followed proper birth spacing. About 62% mothers were conceived within one year, in which 35% breast-fed up to 6 months. Breast feeding techniques were shown to 61% of mothers in hospitals and 34% of mothers was told about the benefit and management of breast feeding.

DISCUSSION

Breastfeeding is the standard way of feeding all infants. It also enhances sensory and cognitive development and is one of the most cost effective ways to reduce infant morbidity and mortality from diarrhoeal diseases, respiratory diseases and other

infections. Later in life, breastfeeding brings continuing benefits in terms of lower rates of obesity and reduced risk of chronic diseases. Breastfeeding also offers health advantages for the breastfeeding mother, including an earlier return to pre-pregnancy weight, reduced risk of breast cancer and ovarian cancer and helps to space pregnancies. There are also significant social, environmental and economic benefits. It is also an environmentally safe method of feeding.

In South Asia, merely 41 % of newborns are breastfed within 1 h of birth [8]. Moreover, it is described as one of the best cost effective interventions and the recommended infant feeding method for the first six months. Exclusive breastfeeding can prevent 823,000 annual deaths or 13.8% of all deaths of infants youngerthan 24 months, and the aim is that the breastfeeding coverage be scaled up to universal levels (90%) [9, 10]. Despite its demonstrated benefits, the practice of exclusive breastfeeding is not common in many developing countries including India [11].

In our study 28.5 % newborns were breast fed within 1 hr of birth. This is low rate. WHO recommends early initiation of breastfeeding (i.e. within one hour of giving birth). Government of India also recommends that initiation of breastfeeding should immediately after birth, preferably within one hour [12]. Ideally nothing should be given to infant up to 6months of age but due the wrong beliefs and culture, people think that prelacteal feed is good for newborn. It is one of the causes for infections in newborn. Here 56% of newborns received prelacteal feed. Water sugar solution was the predominant pre lacteal feed used. But in this study majority children received water as their child needs water during day time. This is very important message needed to be conveyed to people that water is not required to be given to infants upto 6 months of age because breast milk itself would sufficient to meet thirst of the infants. Similar findings reported by Neelima et al. [13] in their study.

Mothers with infants were educated with regard to breast feeding practices. A study conducted in 2000 in Hyderabad showed encouraging trends in upper income groups through medium of books, magazines. Moreover they were well off and could stay at home without financial problem which was not possible for middle and low income mothers. Even in the low income groups it was better because they kept the baby along or wet nursing was available. It was most difficult for middle income groups to EBF [14]. In 2012 in South India a study was conducted among health professionals which reported 90.1% initiation of BF within 24 hrs while 44.4% within 1 hour. Out of these 58.1% were EBF for 6 months. Gender, socio-economic factors and mother's education significantly affected BF practices [15].

In our analysis, we found educated mothers were more likely to continue exclusively breastfeeding than non-educated mothers. These findings were in accordance with evidence from developed countries [9] and in contrary to slum studies [16]. Early initiation of breastfeeding and exclusive breastfeeding for the first 6 months of life prevents around 20% newborn deaths and 13% under-five deaths [17]. It can also reduce mortality due to neonatal infections like sepsis, pneumonia, tetanus, and diarrhoea [18].

Socio-economic status of a family and studies from low and middle income countries report a similar higher prevalence of exclusive breastfeeding in lower socio-economic groups [19, 20]. Results have been reported that mothers having more than one child, were more likely to cease to exclusively breastfeed their infants during the first six months [21] The number of children in the family is found to be negatively associated with the duration of exclusive breastfeeding. The early cessation of exclusive breastfeeding among mothers in a joint family compared to those living in nuclear family. In this study relationship between the season of a birth and exclusive breastfeeding was observed. Infants born during summer were more likely to stop exclusive breastfeeding compared to those born during winter months. Our results are in agreement with studies from India [22]. Summer is the pre-harvesting season and hence likely to be associated with a lack of adequate maternal nutrition. Therefore, our results could reflect mothers' concern about their infants' lack of adequate hydration during summer months prompting them to supplement with liquid or semi-solid foods.

Women with caesarean sections due to longer time spent in the hospital and perhaps greater opportunity to be coached in breastfeeding practices by healthcare providers. In the present study, the mothers most frequently reported discontinuation of Exclusive breast feeding due to insufficient breast milk. Mothers most frequently used complementary foods such as infant formula, animal milk, or water to wean or terminate breastfeeding. The feeling that breast milk was insufficient is a common phenomenon worldwide and a typical response is to give the infant supplements from a very early age [23, 24]. Despite these widespread concerns women are encouraged to continue breastfeeding as maternal milk production is finely tuned to the demand of the infant and therefore, consistent and exclusive breastfeeding is critical for stimulating milk production [25].

Quantitative studies have shown that EBF rates were influenced by mother's education, age, and employment; infant's age, sex; access to healthcare; neighbourhood of residence; and exposure to mass media or counselling [26, 27]. The practice of EBF and factors influencing it are rooted in the socio-cultural, geographical and economic milieu in which mothers

live. In Pakistan, mothers adhered to traditional practices of giving prelacteal feeds despite medical advice given against these [28]. In Lebanon, women have expressed deep-rooted cultural concerns about breast milk having the potential for being "bad milk" that might be nutritionally inadequate or even harmful to the baby [29]. In our study we did not find any difference in religion and also our study restricted to small geographical area.

The study emphasizes the need for more intensive efforts in creating awareness regarding initiation of breast feeding within one hour of birth, exclusive breast feeding till six months and adding supplementary feeding at six months of age. Mothers should also be made aware of the harmful effects of Prelacteal feeds. The key to successful breastfeeding is Information, Education and Communication strategies aimed at behaviour change.

REFERENCES

- Horta BL, Bahl R, Martinés JC, Victora CG, World Health Organization. Evidence on the long-term effects of breastfeeding: systematic review and meta-analyses.
- 2. Goldman AS. The immune system in human milk and the developing infant. Breastfeeding Medicine. 2007 Dec 1;2(4):195-204.
- 3. León-Cava N, Lutter C, Ross J, Martin L. quantifying the benefits of breastfeeding: a summary of the evidence. Food and Nutrition Program/Health Promotion and Protection Division, Pan American Health Organization; Washington DC. 2002.
- 4. Lauer JA, Betrán AP, Victora CG, de Onís M, Barros AJ. Breastfeeding patterns and exposure to suboptimal breastfeeding among children in developing countries: review and analysis of nationally representative surveys. BMC Med. 2004:2:26
- 5. Victora CG, Bahl R, Barros AJD, França GVA, Horton S, Krasevec J, Rollins NC. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet. 2016;387(100017):475–90.
- 6. Hanson LA. Immunobiology of human milk: how breastfeeding protects babies. Pharmasoft Pub.; 2004.
- UNICEF. State of the World's Children 2014: every child counts. New York: United Nations Children's Fund (UNICEF). 2014.
- 8. WHO. Breastfeeding-early initiation: World Health Organization; 2012 [updated 2012]. http://www.who.int/elena/titles/early_breastfeeding/en/
- 9. Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, Murch S, Sankar MJ, Walker N, Rollins NC, Group TL. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. The Lancet. 2016 Jan 30;387(10017):475-90.

- 10. Rollins NC, Bhandari N, Hajeebhoy N, Horton S, Lutter CK, Martines JC, Piwoz EG, Richter LM, Victora CG, Group TL. Why invest, and what it will take to improve breastfeeding practices?. The Lancet. 2016 Jan 30;387(10017):491-504.
- 11. Patel A, Badhoniya N, Khadse S, Senarath U, Agho KE, Dibley MJ, South Asia Infant Feeding Research Network (SAIFRN)*. Infant and young child feeding indicators and determinants of poor feeding practices in India: secondary data analysis of National Family Health Survey 2005–06. Food and nutrition bulletin. 2010 Jun;31(2):314-33.
- 12. National Guidelines on Infant and Young Child Feeding. Ministry of Women and Child development (Food and Nutrition Board). Government of India. 2006.
- 13. Neelima T, Arun K. Breast feeding practices among the Ganda women of Raipur slums. Indian Journal of Maternal and Child Health. 2010;12(3):7.
- 14. Bharati SR. Socio-economic dimensions of breast-feeding-a study in Hyderabad. Health Popul Perspect Issues. 2000;23:144-59.
- Renitha R, Babu TA, Kumar M, Srinivasan S. Breast feeding practices among health care professionals in a tertiary care hospital from South India. Indian journal of public health. 2012 Apr 1;56(2):149.
- 16. Velusamy V, Premkumar PS, Kang G. Exclusive breastfeeding practices among mothers in urban slum settlements: pooled analysis from three prospective birth cohort studies in South India. International breastfeeding journal. 2017 Dec;12(1):35.
- 17. Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS, Bellagio Child Survival Study Group. How many child deaths can we prevent this year?. The lancet. 2003 Jul 5;362(9377):65-71.
- 18. Mullany LC, Katz J, Li YM, Khatry SK, LeClerq SC, Darmstadt GL, Tielsch JM. Breast-feeding patterns, time to initiation, and mortality risk among newborns in southern Nepal. The Journal of nutrition. 2008 Mar 1;138(3):599-603.
- Senarath U, Dibley MJ, Agho KE. Factors associated with nonexclusive breastfeeding in 5 east and southeast Asian countries: a multilevel analysis. Journal of Human Lactation. 2010 Aug;26(3):248-57.
- 20. Khassawneh M, Khader Y, Amarin Z, Alkafajei A. Knowledge, attitude and practice of breastfeeding in the north of Jordan: a cross-sectional study. International breastfeeding journal. 2006 Dec;1(1):17.
- 21. Holbrook KE, White MC, Heyman MB, Wojcicki JM. Maternal sociodemographic characteristics and the use of the Iowa Infant Attitude Feeding Scale to describe breastfeeding initiation and duration in a population of urban, Latina mothers: a prospective cohort study. International breastfeeding journal. 2013 Dec;8(1):7.

- 22. Das A, Chatterjee R, Karthick M, Mahapatra T, Chaudhuri I. The influence of seasonality and community-based health worker provided counselling on exclusive breastfeeding-findings from a cross-sectional survey in India. PloS one. 2016 Aug 11;11(8):e0161186.
- Swetha R, Ravikumar J, Rao RN. Study of breastfeeding practices in coastal region of South India: a cross sectional study. IJCP. 2017;1(2):74– 8.
- Mathur NB, Dhingra D. Breastfeeding. Indian J Pediatr. 2014;81(2):143–9.
- 25. Daly SE, Hartmann PE. Infant demand and milk supply. Part 1: infant demand and milk production in lactating women. J Hum Lact. 1995;11(1):21–6.
- Tamiru D, Aragu D, Belachew T. Survey on the introduction of complementary foods to infants within the first six months and associated factors in rural communities of Jimma Arjo. Int J of Food Sciences and Nutrition. 2013;2(2):77–84.
- 27. Setegn T, Belachew T, Gerbaba M, Deribe K, Deribew A, Biadgilign S. Factors associated with exclusive breastfeeding practices among mothers in Goba district, south East Ethiopia: a cross-sectional study. Int Breastfeed J. 2012;7:17.
- 28. Dykes F, Lhussier M, Bangash S, Zaman M, Lowe N. Exploring and optimising maternal and infant nutrition in north West Pakistan. Midwifery. 2012;28(6):831–5.
- Osman H, El Zein L, Wick L. Cultural beliefs that may discourage breastfeeding among Lebanese women: a qualitative analysis. International Breastfeeding Journal. 2009 Dec;4(1):12.