Research Article

A community based cross sectional study of breastfeeding practices of nursing mothers at block Phagi, district Jaipur (Rajasthan)

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Received: 29 September 2015
Accepted: 10 October 2015

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ABSTRACT

Background: Children are god gifted to society and we are responsible for every need of children. We can give them proper nourishments, care and good health. Breast milk is optimal food for the new born. Breastfeeding is one of the most important determinants of child survival, prevention of childhood infections.

Methods: Community based cross sectional study was conducted at block Phagi, Jaipur, (Raj.), India on 300 mothers having children between 6 months to 24 months of age. Self-administered questionnaire was used to collect information on breastfeeding practices.

Results: Out of 300 nursing mothers, majority of the participants 129 (43.00%) were the age group of 18-23 years followed by 118 (39.33%) from 24-29 years of age group. Majority of study participants 110 (36.66%) were illiterate. 156 (52.00%) participants were belonged to V SES. Large number of 188 (62.66%) of infants had pre-lacteal feeds. 202 (67.33%) of children had not Exclusive Breast Fed.

Conclusions: This study relived that need to creating an awareness of the demerit of pre-lacteal feeds and advantages ofcolostrum, exclusive breastfeeding in rural area.

Keywords: Colostrum, Exclusive breastfeeding, Pre-lacteal feeds

INTRODUCTION

Breast milk is a most precious gift from mother to baby. Mother's milk is a complete food of the baby for the first few months of life. Breast feeding is natural physiological and ideal way of feeding the infants. It provides a unique biological & emotional basis for the health and development of the children.

Breast milk contains all the nutrients that an infant needs in the first 6 months of life, including fat, carbohydrates, proteins, vitamins, minerals and water. Breast milk also contains bioactive factors that augment the infant’s immature immune system and other factors that help digestion and absorption of nutrients. It provides all the energy and nutrients that the infant needs and it continues to provide up to half or more of a child’s nutritional needs during the second half of the first year, and up to one-third during the second year of life.

Breast milk helps in sensory and cognitive development, and protects the infants against infectious and chronic diseases. It has long been recognized that the breast fed infant is better protected against infections and particularly diarrhoeal diseases. Early initiation of breast feeding lowers the risk of postpartum hemorrhage and anaemia in mothers. It boosts mother’s immune system and reduces the incidence of diabetes and cancers.

Poor feeding practices in infancy and early childhood, resulting in malnutrition, contribute to impaired cognitive and social development, poor school performance and reduced productivity in later life. In India, more than 11 lakh babies die during the first month of life, and another
5 lakh during 2 to 12 months of age. Neonatal mortality accounts for almost 40% of all under-five deaths and for nearly 60% of infant deaths. Breastfeeding has been accepted as the most vital intervention for reducing infant mortality and ensuring optimal growth and development of children. More than 15% of child death could be averted in India by optimal breastfeeding practices. Beneficial effects of breastfeeding depend on breastfeeding initiation, its duration, and the age at which the breast-fed child is weaned.

In India, breastfeeding is culturally well accepted but inadequately practiced, partly due to ignorance. Lack of knowledge, prevailing misconceptions and cultural taboos significantly contribute to undesirable breastfeeding practices such as delayed initiation and discarding of colostrums.

So, this study was done to know the breastfeeding practices of nursing mothers.

**Objectives**

1. To study the practice of breast feeding among mothers having child 6 months to 24 months.
2. To study the demographic and socio-economic factors associated with breast feeding practices.

**METHODS**

A community based cross-sectional study was carried out in block Phagi, district Jaipur (Rajasthan), India, after obtaining ethical clearance from Geetanjali University, Udaipur, Rajasthan. There are 8 primary health centres in the block Phagi. A house to house survey was conducted at randomly selected 3 PHC’s areas and after selecting first house randomly then every fifth house was be visited till 300 nursing mothers with child age between 6 months to 24 months was covered by systematic random sampling. Consent was taken from the mothers for the participation in the study. Socio-economic, demographic information of the subjects and the practices of breastfeeding among participants was collected in pre-tested semi structured questionnaire. The collected data was entered in to the MS office and processed and analysed for percentages, proportions.

**RESULTS**

Out of 300 nursing mothers, majority of the participants 129 (43.00%) were from 18-23 years followed by 118 (39.33%) and 53 (17.66%) from age group of 24-29 years and >30 years respectively. Maximum age of study participant was 36 years. Majority of mothers 213 (71.00%) were belonged to Hindu religion followed by 58 (19.33%), 27 (9.00%) and 2 (0.66%) were belonged to Muslim, Jain and Christian religion respectively. 160 (53.33), 103 (34.33), 21 (7.00%) and 16 (5.33) participants were belonged to general, OBC, SC and ST caste respectively. 178 (59.33%) were from the joint family and 122 (40.66%) were nuclear family. Majority of study participants 110 (36.66%) were illiterate, 75 (25.00%) were had primary education, 54 (18.00%) were had secondary education, 43 (14.33%) were had higher secondary education and only 18 (6.00%) participants were had education graduate and above. In the present study, majority of the study subjects 156 (52.00%) were from class V SES followed 71 (23.66%) from class IV, 39 (13.00%) from class III, 23 (7.66%) from class II and 11 (3.66%) from class I respectively.

Out of total 300 children, 157 (52.33%) were males and 143 (47.66%) were females. 286 (95.33%) of the study subjects have ever breastfed their infants, of which 149 (49.66%) and 137 (45.66%) infants were male and female respectively. Large number of 118 (62.66%) of infants had pre-lacteal feeds of which 97 (32.33%) and 91 (30.33%) male and female infants had pre-lacteal feeds respectively. 62 (20.66%) newborns had breast feed within first hour of life, out of which 33 (11.00%) male child and 29 (9.66%) female child. 66 (22.00%) newborns had received breast feed within one hour to six hours. Majority of the 138 (46.00%) newborns had received breastfeeding after 24 hours. 66 (22.00%) newborns had not received colostrum of which 37 (12.33%) male and 29 (9.66%) female child had not received colostrum.

202 (67.33%) of children had not exclusive breast feeding, out of which 107 (35.66%) male and 95 (31.66%) female child.

**DISCUSSION**

Breastfeeding has many benefits for the both mother and infant. Breast milk has nutrients which are required for infant for his first six months of life. It is also noted that breastfeeding is highly influenced with higher intelligence quotient (IQ) in children. Breastfeeding is nearly common all over in India. 95.70% and 96.00% of children have ever been breastfed in India and Rajasthan respectively. 93.60% children were ever breastfed study done by Vyas S et al. This is similar to present study 95.33%, where 49.66% of male child and 45.66% of female child had ever breast fed.

Something other than breast milk called pre-lacteal feeds, like glucose water, honey, gudti, animal milk, or powdered milk. Pre-lacteal feeds are harmful to new born and it can cause diarrhoea. 46.90% and 42.10% of infants had given pre-lacteal feeds study done by Goswami and Das et al respectively. This is similar to present study 62.66% where 32.33% of male child and 30.33% of female child had given pre-lacteal feeds. These practices were due to low level of education status in mothers. In present study 61.66 mothers were belonged to illiterate and below primary level of education. So literacy plays a very important role to understand demerit of pre-lacteal feeding.

Breastfeeding must be started as early as possible in newborns, avoiding delay beyond an hour. The method of
“Breast Crawl” can be adopted for early initiation. Early initiation of breastfeeding is supported for a many of reasons. Oxytocin release due to suckling so its helps the contraction of the uterus and early contraction of uterus can prevent haemorrhage after delivery of baby. Late initiation of breastfeeding is a major cause of giving Pre-lacteal feeds. This study shows that delayed breastfeeding (more than 1hr of delivery) is still practiced. 79.34% of infant had breast fed after 1 hour this observation were similar to 58.10% DLHS-3 Rajasthan. 46.00% of the infant had breast fed after 24 hours. Similar results 52.78% were observed in a study done by Vyas S et al and data for India of NFHS-3 shows 44.70%. Practice of delay initiation of breastfeeding may be due to illiteracy, customs & beliefs, less milk secretion and inadequately motivated mothers for early initiation of breastfeeding.

Colostrum is thick and yellowish or clear in colour and produced by lactating mothers just after delivery of baby for some days. It contains vitamin A and antibodies. About 78.00% of mothers fed colostrum to their child, which is a good practice. Similar observations were reported 84.60% by Syed E. Mahmood et al and 78.40% by Rahul H Dandekar et al. The most common reason for discarding colostrum was their belief of that colostrum is wasted feed.

Table 1: Distribution of study subjects according to according to socio demographic profile (n=300).

| Socio demographic profile          | Male child No. % | Female child No. % | Total No. % |
|------------------------------------|------------------|-------------------|-------------|
| **Age of study subjects**          |                  |                   |             |
| 18–23 years                        | 67 (22.33)       | 62 (20.66)        | 129 (43.00) |
| 24–29 years                        | 60 (20.00)       | 58 (19.33)        | 118 (39.33) |
| ≥ 30 years                         | 30 (10.00)       | 23 (07.66)        | 53 (17.66)  |
| **Total**                          | 157 (52.33)      | 143 (47.66)       | 300 (100)   |
| **Religion of study subjects**     |                  |                   |             |
| Hindu                              | 109 (36.33)      | 104 (34.66)       | 213 (71.00 )|
| Muslim                             | 31 (10.33)       | 27 (09.00)        | 58 (19.33)  |
| Christian                          | 0 (0.00)         | 2 (00.66)         | 2 (00.66)   |
| Jain                               | 17 (05.66)       | 10 (03.33)        | 27 (09.00)  |
| **Total**                          | 157 (52.33)      | 143 (47.66)       | 300 (100)   |
| **Caste of study subjects**        |                  |                   |             |
| General                            | 83 (27.66)       | 77 (25.66)        | 160 (53.33) |
| OBC                                | 53 (17.66)       | 50 (16.66)        | 103 (34.33) |
| SC                                 | 12 (4.00)        | 9 (3.00)          | 21 (7.00)   |
| ST                                 | 9 (3.00)         | 7 (2.33)          | 16 (5.33)   |
| **Total**                          | 157 (52.33)      | 143 (47.66)       | 300 (100)   |
| **Family Type of study subjects**  |                  |                   |             |
| Nuclear                            | 55 (18.33)       | 67 (22.33)        | 122 (40.66) |
| Joint                              | 102 (34.00)      | 76 (25.33)        | 178 (59.33) |
| **Total**                          | 157 (52.33)      | 143 (47.66)       | 300 (100)   |
| **Education Status of study subjects** |                  |                   |             |
| Illiterate                         | 64 (21.33)       | 46 (15.33)        | 110 (36.66) |
| Primary                            | 37 (12.33)       | 38 (12.66)        | 75 (25.00)  |
| Secondary                          | 25 (8.33)        | 29 (9.66)         | 54 (18.00)  |
| Higher secondary                   | 24 (8.00)        | 19 (6.33)         | 43 (14.33)  |
| Graduate and above                 | 7 (2.33)         | 11 (3.66)         | 18 (6.00)   |
| **Total**                          | 157 (52.33)      | 143 (47.66)       | 300 (100)   |
| **Socioeconomic Status of study subjects (Revised BG Prasad’s classification 2014).** |      |                   |             |
| Class I (Rs.5571 and above)        | 7 (2.33)         | 4 (1.33)          | 11 (3.66)   |
| Class II (Rs.2786-5570)            | 9 (3.00)         | 14 (4.66)         | 23 (7.66)   |
| Class III (Rs.1671-2785)           | 17 (5.66)        | 22 (7.33)         | 39 (13.00)  |
| Class IV (Rs.836-1670)             | 38 (12.66)       | 33 (11.00)        | 71 (23.66)  |
| Class V (Below Rs.836)             | 86 (28.66)       | 70 (23.33)        | 156 (52.00) |
| **Total**                          | 157 (52.33)      | 143 (47.66)       | 300 (100)   |
Table 2: Distribution of study subjects according to ever had breastfed to their children (n=300).

| Ever breastfed | Male child No. | Female child No. | Total No. |
|----------------|----------------|------------------|-----------|
| Yes            | 149 (49.66)    | 137 (45.66)      | 286 (95.33) |
| No             | 8 (2.66)       | 6 (2.00)         | 14 (4.66)  |
| Total          | 157 (52.33)    | 143 (47.66)      | 300 (100)  |

χ² = 0.13; df = 1; p = 0.71

Table 3: Distribution of study subjects according to pre-lacteal feed given to their Children (n=300).

| Pre-lacteal feeds given to the newborn | Male child No. | Female child No. | Total No. |
|---------------------------------------|----------------|------------------|-----------|
| Yes                                   | 97 (32.33)     | 91 (30.33)       | 188 (62.66) |
| No                                    | 60 (20.00)     | 52 (17.33)       | 112 (37.33) |
| Total                                 | 157 (52.33)    | 143 (47.66)      | 300 (100)  |

χ² = 0.11; df = 1; p = 0.74

Table 4: Distribution of study subjects according to initiation breastfeeding their Children (n=300).

| Initiation of Breastfeeding | Male child No. | Female child No. | Total No. |
|-----------------------------|----------------|------------------|-----------|
| < 1 Hours                   | 33 (11.00)     | 29 (9.66)        | 62 (20.66) |
| 1 hours to 6 hours          | 35 (11.66)     | 31 (10.33)       | 66 (22.00) |
| 7 hours to 24 hours         | 12 (4.00)      | 8 (2.66)         | 20 (6.66)  |
| >24 hours                   | 69 (23.00)     | 69 (23.00)       | 138 (46.00)|
| Not breast fed              | 8 (2.66)       | 6 (2.00)         | 14 (4.66)  |
| Total                       | 157 (52.33)    | 143 (47.66)      | 300 (100)  |

χ² = 0.93; df = 4; p = 0.91

Babies who have only breast milk for 4-6 months are less sick than babies who eat other foods. Babies who feed exclusive breast feeding till 6 months they were less prone to suffering from infectious diseases. Only 32.66 mothers exclusively breast fed their babies up to 6 months. This similar to NFHS-3, 36.30% in rural area of Rajasthan and in study 28.43% done by Wadde SK et al.13,21 Many mothers feed water to babies within first four months of his life so it was noted that exclusive breast feeding was very low due to lower level of education and social myths.

Table 5: Distribution of study subjects according to colostrum feed to their children (n=300).

| Colostrum | Male child No. | Female child No. | Total No. |
|-----------|----------------|------------------|-----------|
| Fed       | 120 (40.00)    | 114 (38.00)      | 234 (78.00)|
| Not fed   | 37 (12.33)     | 29 (9.66)        | 66 (22.00)|
| Total     | 157 (52.33)    | 143 (47.66)      | 300 (100)|

χ² = 0.47; df = 1; p = 0.49

Table 6: Distribution of children’s according to duration of exclusive breast feeding (n=300).

| Exclusive Breast Feeding | Male child No. | Female child No. | Total No. |
|--------------------------|----------------|------------------|-----------|
| Fed                      | 50 (16.66)     | 48 (16.00)       | 98 (32.66)|
| Not fed                  | 107 (35.66)    | 95 (31.66)       | 202 (67.33)|
| Total                    | 157 (52.33)    | 143 (47.66)      | 300 (100)|

χ² = 0.10; df = 1; p = 0.75

CONCLUSION

This study revealed that large no of infants had pre-lacteal fed, only 20.66% of mothers fed their child within one hour of delivery and 67.33% of children had not exclusively breast feeding. Thus policy makers should do emphasize on more IEC activity in females. Health programme for breast feeding like baby friendly hospital initiative must be implemented at the at village level by the ANM, ASHA, AWW and other health agency. This programme should be strictly monitored by administrative agencies under the NRHM. Celebrates MCHN day in a month as a breastfeeding day to increase the awareness and promote the breastfeeding.

ACKNOWLEDGEMENTS

Authors acknowledge the great helps perceived from the scholars, whose articles are noted and used in references of this article. The authors of this article are also grateful to editors, publishers, and authors whose literature for this article has been reviewed and discussed.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Meharda B, Dixit M. A community based cross sectional study of breastfeeding practices of nursing mothers at block Phagi, district Jaipur (Rajasthan). Int J Community Med Public Health 2015;2:404-8.