Assessment of breastfeeding practices in lactating mothers: more road to cover

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ABSTRACT

Background: The mother’s milk is the best gift nature has provided. It is complete nourishment for babies. The World Health Organization (WHO) recommends that infants be exclusively breastfed for the first six months, followed by breastfeeding along with complementary foods for up to two years of age or beyond. Absence of remarkable progress in indicators of breastfeeding suggest that certain gaps still exist which restrict achievement of national development goals. These gaps could have resulted from unawareness and lack of knowledge regarding appropriate IYCF practices. Appropriate intervention in terms of awareness programmes may help in achieving the national development goals.

Methods: A cross sectional hospital based study was conducted over a period of 3 months. Lactating mothers in postnatal ward were questioned using self-administered breastfeeding knowledge questionnaire about their knowledge, attitude and practices of breastfeeding.

Results: Total of 100 lactating mothers were enrolled. Majority of the mothers were in the age group of 20-25 years (72%), 65% of mothers were from rural area. only 27% mothers practiced initiation of breastfeeding after birth. 62% of mothers initiated breastfeeding after 30 minutes of birth. 10% mothers gave prelacteal feeds, honey was the most commonly given prelacteal feed. 90% of the mothers fed their baby colostrum. 90% of mothers knew that breast milk is ideal feed for newborn.

Conclusions: The primary care givers need to implement strategies to educate mothers about breastfeeding in antenatal and post natal checkups to enhance good breastfeeding practice thereby reducing infant mortality and morbidity. A special strategy to reach out to poor socio economic status and illiterate mothers is need of the hour.

Keywords: Breastfeeding knowledge, Hospital practices, Initiation of breastfeeding, Socio-demography

INTRODUCTION

The best gift nature has provided is the mother’s milk. It is complete nourishment for babies. Breastfeeding is recognized worldwide as beneficial for both the mother and child, as breast milk is considered the best source of nutrition for an infant.\textsuperscript{1} The World Health Organization (WHO) recommends that infants be exclusively breastfed for the first six months, followed by breastfeeding along with complementary foods for up to two years of age or beyond.\textsuperscript{2} Exclusive breastfeeding is defined as a practice whereby the infants receive only breast milk and not even water, other liquids, tea, herbal preparations, or food during the first six months of life, with the exception of vitamins, mineral supplements, or medicines.\textsuperscript{3} Breastfeeding protects babies against various diseases like diarrhea, pneumonia, and allergies and boosts their immunological response.\textsuperscript{4} Study from Ghana found that 22% of deaths among newborns were prevented if all newborns started breastfeeding within 1 hour of birth,
his figure could be 31% for developing countries. According to NFHS-4 data, initiation of breastfeeding within one hour of birth in India is only 41.6 per cent even after a tremendous increase in institutional births from 38.7 per cent (2005-06) to 78.9 per cent (2015-16). Exclusive breastfeeding rates amongst infants 0-6 months of age, from 46.3 per cent (2005-06) to 54.9 per cent (2015-16). Initiation of breastfeeding within 1 hour rates across India varied from 25.4% to 75.4%, exclusive breastfeeding (0-6 months) rates varies from 35.8% to 77.2%. Absence of remarkable progress in these indicators suggest that certain gaps still exist which restrict achievement of national development goals. These gaps could have resulted from unawareness and lack of knowledge regarding appropriate IYCF practices. Appropriate intervention in terms of awareness programmes may help in achieving the national development goals.

Hence we planned this study with the objective to assess the knowledge, attitude and practice of breastfeeding among lactating mothers in a tertiary referral centre in central Karnataka.

**METHODS**

It was a cross sectional descriptive study conducted at Women and Children’s Hospital, Davanagere, for a period of 3 months, August 2015 - October 2015. Study population included 100 lactating mothers in post natal ward.

**Inclusion criteria**

Healthy breastfeeding mothers in the post natal ward.

**Exclusion criteria**

Mothers with medical/surgical illness, mothers whose babies are admitted in NICU.

**Data collection**

By using self-administered breastfeeding knowledge questionnaire.

**Study procedure**

The questionnaire was self-administered in local language. Mothers meeting inclusion criteria were given questionnaire to answer. Illiterate mothers were asked and responses were recorded. Demographic details like age, parity, educational status, working status, income, type of delivery, weight of baby and sex of baby were recorded. Mother’s knowledge and practices of breast feeding were assessed. Assessment of onset and adequacy of breast feeding was assessed. General characteristics of the patients were presented in terms of percentage. Numerical variables of breastfeeding practices, breast feeding knowledge were tabulated and assessed.

**RESULTS**

100 lactating mothers in post natal ward were interviewed. Table 1 shows the characteristics of participants in the study.

**Table 1: Demographic variables of the participants.**

| Characteristics          | Number |
|--------------------------|--------|
| Age                      |        |
| <20 years                | 8      |
| 20-25 years              | 72     |
| 25-30 years              | 18     |
| >30 years                | 2      |
| Place of residence       |        |
| Urban                    | 35     |
| Rural                    | 65     |
| Family                   |        |
| Nuclear                  | 56     |
| Extended                 | 44     |
| Religion                 |        |
| Hindu                    | 72     |
| Muslim                   | 28     |
| Illiterate               | 29     |
| Primary                  | 32     |
| Secondary                | 21     |
| Higher secondary         | 10     |
| Pre university           | 08     |
| Graduate                 | 01     |
| Occupation               |        |
| House wife               | 94     |
| Self employed            | 05     |
| Blue collar              | 01     |
| Income                   |        |
| >6528                    | 0      |
| >3264-6527               | 6      |
| 1959-3263                | 24     |
| 979-1958                 | 50     |
| <978                     | 25     |
| Parity                   |        |
| Primi                    | 43     |
| Multi                    | 57     |
| Type of delivery         |        |
| Normal vaginal delivery  | 90     |
| LSCS                     | 08     |
| Assisted vaginal delivery| 02     |
| Sex of baby              |        |
| Male                     | 51     |
| Female                   | 49     |
| Birth weight             |        |
| 1000-1500 gm             | 06     |
| 1500-2500 gm             | 24     |
| >2500 gm                 | 70     |

Majority of the mothers were in the age group of 20-25 years (72%), 65% of mothers were from rural area, 56% of mothers belonged to nuclear family, more than half of the mothers were school dropouts, majority of the mothers were home makers. Nearly 90% of the mothers belonged to lower and lower middle class family. Multi para mothers contributed to 57% of the study sample. Only 8% of the babies were delivered by LSCS. Male and female babies were equal in number. 30% babies were low birth weight.
On assessment of breastfeeding practices, only 27% mothers practiced initiation of breastfeeding after birth. 62% of mothers initiated breastfeeding after 30 minutes of birth. Only 1/3rd of mothers fed baby on demand, 10% mothers gave prelacteal feeds, honey was the most commonly given prelacteal feed. 90% of the mothers fed their baby colostrum, more than half of mothers didn’t practice burping after feeding, lying was the most commonly fed position followed by sitting position. Majority of the mothers cleaned their breast with water before feeding. Most of the mothers wiped baby’s mouth after breastfeeding. 86% of the mothers gave top feed in addition to breast milk. Almost all babies were fed till 5-10 minutes, only 27% of mothers followed restricted diet during breastfeeding.

### Table 2: Breast feeding practices observation of the participants.

| Observation                        | Number |
|------------------------------------|--------|
| **Initiation of breastfeeding**    |        |
| < 30 minutes                       | 27     |
| 30 minutes-2 hours                 | 62     |
| 2-6 hours                          | 08     |
| 6-24 hours                         | 00     |
| 24-48 hours                        | 01     |
| >48 hours                          | 02     |
| **Frequency of breastfeeding**     |        |
| On demand                          | 33     |
| Every 24 hours                     | 36     |
| Every 4 hours                      | 31     |
| On insistence of elders            | 01     |
| **Prelacteal feeds**               |        |
| Nothing                            | 90     |
| Honey                              | 09     |
| Milk other than breast milk        | 01     |
| **Feeding of colostrum**           |        |
| Yes                                | 90     |
| No                                 | 10     |
| **Burping done after feed**        |        |
| Yes                                | 46     |
| No                                 | 54     |
| **Position of feeding**            |        |
| Sitting                            | 40     |
| Lying                              | 60     |
| **Cleaning of breasts**            |        |
| Yes                                | 64     |
| No                                 | 36     |
| **How often do you clean**         |        |
| don’t clean                         | 23     |
| Each time before feed              | 60     |
| After feed                         | 03     |
| Both                               | 09     |
| Sometimes after feed               | 05     |
| **How do you clean breast**        |        |
| Water                              | 69     |
| Soap and water                     | 09     |
| Milk                               | 16     |
| Others                             | 06     |
| **Do you wipe baby’s mouth after feeding** |   |
| Yes                                | 83     |
| No                                 | 17     |
| **Is baby top fed**                |        |
| Yes                                | 86     |
| No                                 | 14     |
| **Baby generally feeds for**       |        |
| 0-5 minutes                         | 44     |
| 5-10 minutes                       | 48     |
| 10-20 minutes                      | 07     |
| >20 minutes                        | 01     |
| **Any restriction in diet while breastfeeding** |     |
| Yes                                | 23     |
| No                                 | 77     |

**Table 3: Breast feeding knowledge observations in participants.**

| Observation                        | Number |
|------------------------------------|--------|
| **Ideal feed for newborn**         |        |
| Breast milk                        | 90     |
| Formula feed                       | 05     |
| Cow’s milk                         | 04     |
| Buffalo’s milk                     | 01     |
| **When should BF be started in newborn** |      |
| Immediately after birth            | 56     |
| 30 minutes                         | 27     |
| 2 hours                            | 12     |
| Whenever breast becomes full       | 02     |
| 2-24 hours                         | 02     |
| 24-48 hours                        | 01     |
| >48 hours                          | 00     |
| **Importance of colostrum**        |        |
| Yes                                | 46     |
| No                                 | 54     |
| **What should be done with colostrum** |    |
| Feed to baby                       | 88     |
| Throw away                         | 06     |
| don’t know                         | 06     |
| **How frequently baby should be fed** |     |
| Whenever baby cries                | 55     |
| 2nd hourly                         | 30     |
| 3rd hourly                         | 15     |
| **How long baby should be fed per feeding** |    |
| Till baby sleeps                   | 26     |
| <5 minutes                         | 09     |
| 5-10 minutes                       | 56     |
| 10-20 minutes                      | 07     |
| >20 minutes                        | 03     |
| 2 months                           | 08     |
| 4 months                           | 04     |
| 6 months                           | 48     |
| 8 months                           | 20     |
| >8 months                          | 20     |
| 6-12 months                        | 16     |
| 12-23 months                       | 48     |
| >24 months                         | 26     |

On assessment of knowledge about breast milk and breastfeeding, 90% of mothers knew that breast milk is ideal feed for newborn, 56% of mothers knew immediate initiation of breastfeeding in newborn, less than half of mothers knew about importance of colostrum, 88% of mothers knew that colostrum should be fed to newborn, half of the mothers were aware of demand feeding, 56% of mothers thought baby should be fed for 5-10 minutes, only half of the mothers were aware of exclusive breastfeeding, 48% of mothers thought breastfeeding should be stopped by 12-23 months.
DISCUSSION

It was observed in the present study that 97% of mothers initiated breastfeeding within first day of birth. Only 27% of mothers initiated breastfeeding immediately within 30 minutes of birth, which is significantly low compared to NFHS-4 data where 41.6% babies were breastfed within 1 hour of birth. A delay in initiation will lead to a delay in the development of oxytocin reflex, which is very important for the contraction of the uterus and the breast milk reflex. 97% mothers initiated breastfeeding within first day of birth. Our finding is much higher than (37.1%) the national data. Studies show that the earlier breastfeeding begins the earlier and more effective the consolidation of the process, and therefore, a better impact on the after-birth period, which helps in the earlier initiation of the secretion of breast milk.

10% mothers gave prelacteal feeds, honey was the most commonly given prelacteal feed. Similar findings were reported in previous studies. Pre-lacteal feeds are given believing they act as laxatives or as a means of clearing the meconium. Unfortunately, the mothers are not aware that the pre-lacteal feeds could be a source of contamination. Honey, which is used as prelactal food in infants is not recommended to be given below the age of one year, because of the risk of infection by Clostridium botulinum.

90% of mothers fed colostrum to baby which is a good practice. Similar findings were reported in previous studies. But only half of the mothers were aware of its importance or role. Colostrum is rich in vitamins, minerals, protein and immunoglobulins that protect the child from infections. The most common reason stated by mothers for discarding colostrum was that they thought colostrum was not good for the child.

Only one third of mothers were aware of demand feeding. Nearly half of mothers were practiced burping after feeding, burping helps to prevent regurgitation of feeds.

Majority of the mothers practiced good hygienic practices, they cleaned their breasts while feeding. This prevents infection in mothers and helps them to sustain breastfeeding.

Quarter of mothers had restricted diet while breastfeeding, rest all mothers increased their diet while breastfeeding. Similar findings were reported in previous studies. The reason behind restriction of diet in mothers could be belief that food consumed by mother may harm the baby by developing symptoms like cold, cough and increased frequency of stools.

Only half of the mothers were aware of exclusive breastfeeding till 6 months, this can be attributed to the fact that the majority of the study population were mothers belonging to low socioeconomic class with a low level of literacy.

Exclusive breastfeeding for the first six months, which is highly recommended, is often a necessity in poor communities that cannot afford formula or cow’s milk.

Creating an awareness of its advantages will further strengthen and support this common practice in rural communities and avoid the early introduction of complementary foods for sociocultural reasons. Thus, no opportunity should be missed by doctors and health workers to educate the rural women on the benefits of breastfeeding.

One potential limitation of this study could be the small localized population. Hence, the findings in this study cannot be generalized.

CONCLUSION

Despite the higher rates of early initiation of breastfeeding and exclusive breastfeeding, there was low awareness of the benefits of exclusive breastfeeding.

Creating an awareness of the advantages of exclusive breastfeeding will further strengthen and support this common practice in rural communities and avoid early introduction of complementary foods for sociocultural reasons.

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