Prevalence of exclusive breastfeeding among recently delivered women in Block Hazratbal, District Srinagar

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Abstract
Background: Breast feeding is the best documented feed for the infant during the initial six months of life. It is essential for child’s optimal growth and development and also reduces the incidence of diarrhoea and pneumonia among infants. All around the world, breast feeding is associated with myths, superstitions and various cultural, religious and traditional practices, especially in poor developing countries. Poor feeding during early life increases risk of morbidity and mortality in later years and affects cognitive functioning as well.

Methodology: A community based cross sectional study was conducted from June 2016 to December 2016 in which a total of 200 mothers who had given birth within last one year were selected by systematic sampling method. The mothers were interviewed regarding breast feeding practices of their infants using structured pre tested questionnaire. Data regarding socio-demographic profile, birth history of the child and breast feeding practices was also collected.

Results: In the study, mean age of the participants was 28.66 years, 75% were illiterate, 73% belonged to joint families and 29% of the infants belonged to the age group of 3-6 months. The prevalence of exclusively breast fed infants was 38.5% and the most common reason for such a low percentage of exclusively breast fed infants was usage of pre-lacteal feed (94.3%).

Conclusion: The prevalence of exclusively breast fed infants was low in the study area which could be attributed to the use of prelacteal feed soon after the birth of the child. The reason for the use of prelacteal feed at the time of the birth of the child is because of the prevalent socio religious factors in the area.

Keywords: Recently delivered women, exclusive breastfeeding, pre-lacteal feeds, socio religious factors.

Introduction
Breast milk is the best gift from the mother to her child and has been documented as the excellent feed for the infant during the initial six months of life. It provides all the essential requirements in form of energy, vitamins, minerals and all the elements required by the infant for his optimal growth and development[1]. Breast feeding reduces the incidence of diarrhoea and pneumonia in the child and also decreases the risk of hospitalization due to these diseases. Breast feeding is thus a way to reduce childhood mortality and morbidity[2](3). Breast feeding also helps to develop a bond between mother and her child[3]. In addition to the
benefits to the child, breastfeeding also has some benefits for the mother. The mother who breastfeeds her child has less chances of developing premenopausal breast cancer and ovarian cancer (3).

Exclusive breast feeding is defined by World Health Organisation as the infant receives only breast milk. No other liquids or solids are given, not even water, with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines (4). Prelacteal feed is defined as anything given to the infant before initiation of breast feeding (4). The milk or the feed other than mother’s milk is at risk of pathogenic contamination and over dilution leading to increased risks of morbidity and undernutrition in the infant (5).

Breast feeding is a common practice in developing countries like India and is associated with myths and superstitions. These myths and superstitions lead to the practice of giving the new-born a prelacteal feed such as honey or sugar or water which thus lowers down the prevalence of exclusively breast fed children (6). It is a fact that breastfeeding is also related to social, cultural and traditional patterns of a given population (7). Avoiding colostrum and giving prelacteal feed and bottle feeding the child are contributory factors for development of diarrhoea and pneumonia in the infant which may ultimately lead to high infant mortality (8). Poor feeding may also increase the risk of malnutrition in the children which may in turn lead to increased morbidity and mortality (9).

As per NFHS 4, the prevalence of exclusively breast fed children under age 3 in India is 41.6% which has improved over last 10 years as NFHS 3 prevalence was as low as 23.4%. In Jammu and Kashmir, the prevalence of exclusively breast fed children under age 3 was 46% slightly higher than the national levels (10)(11).

Aims and Objectives
To determine the prevalence of exclusively breast fed children in the study area.

Methodology
It was a community based cross sectional study conducted in Block Hazratbal of District Srinagar from June 2016 to December 2016. A total of 200 mothers were interviewed who had recently delivered 1 year back. The study participants were selected by systematic sampling method. After selecting the study participants a house to house visit was done. Informed verbal consent was obtained from eligible mothers. Participants were explained the objective of the study and data was collected using a structured questionnaire. Information regarding demographic and socio-economic characteristics, birth history of the child, the place and mode of delivery of the child was also obtained. The mother was asked about the breast feeding practices and whether the child was given any pre-lacteal feed or not. The nature of the pre-lacteal feed was also ascertained. The reasons for not exclusively breast feeding the child were also inquired from the mother. In case of a working mother, the information was obtained from the grandmother of the child. The data was entered in Microsoft Excel and results were described in form of percentages.

Results
A total of 200 nursing mothers were interviewed with a mean age of 28.66 years. The majority of the infants were males (57.0 %) and belonged to the age group of 3 – 6 months (29%). Majority of the mothers were illiterate (75.0%), homemakers (93.0 %) and belonged to joint families (73.0%) (Table 1).

| Characteristics | Number (n=200) | Percentage (%) |
|-----------------|---------------|----------------|
| Age of the child (months) |         |               |
| 0 – 3           | 57            | 28.5           |
| 3 – 6           | 59            | 29.0           |
| 6 – 9           | 50            | 25.0           |
| 9 – 12          | 35            | 17.5           |
| Gender of the child |         |               |
| Male            | 114           | 57.0           |
| Female          | 86            | 43.0           |
| Mother’s age (years) |        |               |
| Mean            | 28.66         |                |
| SD              | 2.347         |                |
Place of delivery

| Institute | 199 | 99.5 |
|-----------|-----|------|
| Home      | 1   | 0.5  |

Mode of delivery

| Normal | 30  | 15.0 |
|--------|-----|------|
| LSCS   | 170 | 85.0 |

Education level of the mother

| Illiterate | 150 | 75.0 |
| Primary    | 18  | 9.0  |
| Middle     | 16  | 8.0  |
| High school| 8   | 4.0  |
| Higher secondary | 2 | 2.0 |
| Graduate   | 2   | 1.0  |
| Post graduate and above | 2 | 1.0 |

Family type

| Joint    | 146 | 73.0 |
| Nuclear  | 54  | 27.0 |

Working

| Yes | 14  | 7.0 |
| No  | 186 | 93.0 |

Socio economic status

| Upper class | 0   | 0   |
| Upper middle class | 3 | 1.5 |
| Lower middle class | 15 | 7.5 |
| Upper lower class   | 158 | 79.0 |
| Lower class         | 24  | 12.0 |

Prevalence of exclusive breastfeeding

Out of 200 infants only 77 (38.5%) were exclusively breast fed. (Figure 1)

Table 2 Reasons for not exclusively breast feeding the child

| Reason given by the mother | Number (n) | Percentage (%) |
|-----------------------------|------------|----------------|
| Prelacteal given            | 116        | 94.3           |
| Lactation failure in mother | 4          | 3.3            |
| Working mothers             | 3          | 2.4            |
| Total                       | 123        | 100            |

Table 3: Types of pre-lacteals given to the newborns

| Type of prelacteal given | Number (n) | Percentage (%) |
|--------------------------|------------|----------------|
| Khaq –e – qarbala        | 107        | 92.4           |
| Sugar                    | 4          | 3.4            |
| Water                    | 2          | 1.7            |
| Honey                    | 2          | 1.7            |
| Dates                    | 1          | 0.8            |
| Total                    | 116        | 100            |

*Sacred soil from place of Karbala in Iraq.

Discussion

Breast milk is the best feed for the child. It is not only beneficial to the child but also has some benefits for the lactating mother. Mothers have been breastfeeding their children from times immemorial and are continuing to do so till date. In recent times, its importance has been decreasing due to rise in socio economic status and increased employment of mothers. The benefits of breast feeding are well known and still the rates of exclusively breast fed children are low.

In our study, a total of 200 mothers were interviewed who had recently delivered with a mean age of 28.66 years. In a study conducted by Temesgan Kelaye(12), the mean age of mother’s was consistent with the findings in our study. In another study conducted by Abdulbasit Seid(13), the mean age of mother’s was in accordance to the findings in this study. Most of the mothers interviewed were illiterate (75%) and 7.1% were working which is a finding consistent with a study conducted by Prakash Chandra Joshi(14). The maximum number of children belonged to age group of 3-6 months with majority children being males (57%) which is similar to the findings of a study conducted by Abdul basit Musa Seid et al(13). Majority of the children were delivered in an institution through caesarean section with a mean birth weight of 2.68 kgs. The maximum number of mother child duo belonged to joint families.
(73%) which is similar to the study conducted by Prakash Chandra Joshi in Bangladesh\(^{(14)}\).

The prevalence of exclusively breast fed children in our study was found to be 38.5% (77) which is slightly lower than the State and National levels as per NFHS-4\(^{(11)(10)}\). A study conducted by Prakash Chandra Joshi in Bangladesh had similar findings as of our study (36%)\(^{(14)}\). In other studies conducted by M. Sai Sunil Kishore et al in North India\(^{(15)}\) and Maria Laura W Mascarenhas et al in Brazil\(^{(16)}\) the findings were consistent with our study with a prevalence of 30% and 32.5% respectively. Our findings were also similar to the studies conducted by Laura Lauria et al in Italy (32.5%) and Shankar Radhakrishnan et al in Tamil Nadu India (34%)\(^{(17)(18)}\). Another study conducted by Prakash Chandra Joshi et al in Bangladesh (36%) had results consistent with our study\(^{(14)}\). The studies conducted by Aroona Sabin et al in Pakistan (41.5%) and Indrani Gogoi et al in Dibrugarh Town (41%) had slightly higher rates as compared to the rates in our study\(^{(19)}\). A study conducted by Oluwafolahan O. Sholeye et al in Nigeria (56.1%) also reported higher rate of exclusively breast fed children as compared to the results found in our study\(^{(1)}\).

In contrast to guidelines proposed by WHO on EBF (where no prelacteals are to be given to newborn before the initiation of breastfeeding), the prevalence of prelacteal feeding in our study was 58%. 116 infants were given a prelacteal feed at the time of the birth which is similar to the findings of the study conducted by M Sai Sunil Kishore et al in North India (51%)\(^{(15)}\). In a study conducted by Sapna Patil et al in slums in Western India the percent of infants given prelacteal was similar to our study\(^{(5)}\). In another study conducted by Ahmed GharibKhamis et al in Zanzibar, the percentage of infants who were given a prelacteal was similar to our study\(^{(9)}\).

The prelacteal was the most common reason for nonexclusively breast fed infants followed by lactation failure in the mother. The lactation failure or inadequate breast milk production was also found as a cause of nonexclusively breast fed child in the studies conducted by Prakash Chandra Joshi et al in Bangladesh and Shankar Radhakrishnan et al in Tamil Nadu\(^{(14)(17)}\). The most common pre-lacteal given to the infants was KHAQQ-QARBALA (which is sacred soil from the place of Karbala in Iran). The high percentage of this particular prelacteal in the study area was contributed the fact that the participants belong to a particular religious sect and it is a religious practice among them to give this as a prelacteal at the time of birth. Other prelacteals included sugar, water, honey and dates.

**Conclusion**

The study concluded that the percentage of the infants who were exclusively breast fed was low in the study area owing to the higher rate of use of prelacteals. Since prelacteal feeding is practiced in all Muslim communities like ours, it downfalls the rate of EBF because by definition a child provided with prelacteal feed is not exclusively breastfed even if child was later breastfed wholly and completely by breastmilk upto six months.

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