**Abstract**

**Objectives:** To study breastfeeding practices in mothers in Vatika rural area of Jaipur, Rajasthan.

**Material and methods:** A incidence based cross-sectional research study was performed in the rural area of Jaipur, includes 400 mothers and their infants. Data obtained for feeding practices were collected and analyzed. **Results:** Out of 400 infants 223 has started breastfeeding immediately. Among 177 infants of having delayed breastfeeding, in maximum cases that is 92 (51.98%) reason is delayed lactation followed by child illness. A 91.25% infants breastfeeding given on demand were **Conclusion:** The survey area was dominated with multiple health problems dominated by dual problems of malnutrition along with infective diseases; socioeconomic factors mainly responsible for these problems were mother’s illiteracy, mother working conditions, family income and socioeconomic status. Thus socioeconomic status is a vital aspect distressing the care of infants in requisites personal hygiene, weaning and very importantly breastfeeding. **Keywords:** socio-economic aspect, breastfeeding, malnutrition, multiple health problems occupations, literacy status

**Introduction**

Human breast milk, nature perfect gift is vastly superior to anything available from our most sophisticated technologies. The most effective way to feed a baby with whole food and protection with a caring environment is a breastfeeding. (1) Breastfeeding should be initiated soon after birth unless medical condition disallowed them. The American Academy of Pediatrics (AAP) and WHO muscularly advocate breastfeeding has the chosen feeding for all infants. Multiple factors are responsible for the success of breastfeeding initiation and continuation such as education about Breast feeding, hospital breastfeeding practices and policies, schedule and timely follow up concern, family, and social sustain. (2) 1st August to 7th August, a whole week is celebrated as a World breastfeeding week. The theme of World breastfeeding week of the year 2013 was “Breastfeeding Support: Close to Mothers”. Nutrition and immunity provided by breastfeeding help a child to easily learn and help to avert obesity and chronic diseases in future life. (3) Exclusive breastfeeding involves only breast milk given to babies as a food. Exclusive breastfeeding does not involve pre-lacteal feeds
like glucose water, honey, water, juices, vitamins, animal, powdered milk/infant formula and gripe water or any other foods other than breast milk. Specifically breastfeeding to infants for 6 months is highly recommended by WHO and UNICEF. The World Health Assembly at its 45th session (1992) adopted the following assertion: infants of 1-6 months should only be fed with the breast milk not even water and other liquids, or even water is required to meet the normal infant’s nutritional requirements. Infant feeding practices began to change in industrialized countries, and then it was followed by females residing in underdeveloped countries by limiting the extent of breastfeeding. Following practices is imitated by uneducated females of the urban and rural areas of underdeveloped countries. Prevention of malnutrition and infections can be initiated by exclusive breastfeeding which can save the life of many infants. Child’s growth and development essentially affected by breast milk intake.

Breastfeeding is a universal practice in developing countries like India. In India, many of the mothers breastfed their infants up to 2 years or even beyond it which is very good for child endurance and ample growth. Baby-friendly Hospital Initiative (BFHI) in 1992 and subsequently world health assembly (WHA54: 2; 18) in May 2001 was launched by UNICEF and WHO involves the approval of a resolution on exclusive breastfeeding for first 6 months. Baby-friendly hospital initiative (BFHI), also recommends the same fact that infant should be only breastfed for first 6 months. Most of the babies do not require any other food or liquid or even water during this period. There are increase chances of deleterious infection due to prelacteal feed and water supplementation in infants of 1-6 months. Breastfeeding should be continued up to 2 years of age or beyond. An additional advantage of full and exclusive breastfeeding for first 6 months or more than that serves as a natural contraceptive method this helping in spacing.

However nation is continuously launched many dynamic promotional activities; a large number of newborn, infants are still deprived of colostrum and exclusive breast milk. Hence, the present research was done on mothers of the rural area of Jaipur to measure the routine breastfeeding practices and their impact on growth and development of infants.

MATERIAL AND METHODS
An incidence based cross-sectional research study was performed in the rural area (Vatika) of Jaipur District, includes 400 mothers and their infants, a rural health training Centre (R.H.T.C) of the Department of Community Medicine, Mahatma Gandhi medical college and attached group of hospitals was involved in this study. Prior to commencement of this study, permission to conduct this study was taken from the organized ethical committee of the college. Information regarding the occupation of subjects, socio-economic status, literacy status and type of work was collected and analyzed. Information was also collected regarding infant’s anthropometric measurements, feeding practices, weaning and immunization prominence.

Pretested structured Performa questionnaire and Door to door survey was also undertaken to collect the data. Prior to the interview, consent was obtained from each subject and also explained the purpose of the study to each subject prior to the administration of tools of data collection. All the information was assured to be confidential. A structured pretested Proforma containing two schedules were used. Infantometer, Salter hanging weighing machine, steel non-stretchable tape instruments were incorporated in this study.

Literacy: Criteria used was defined in GOI, registrar general census scale was used.
Illiterate category involves mothers those cannot read and write in any language. Mothers who can read but cannot write were also included illiterate.

The literate category includes mother’s that can read and write in any language. Mother’s have the formal education of Primary, Middle, Secondary, Higher secondary and Graduate & Post Graduate level.

Occupation: Occupation was classified as housewife, labourer, farmer, service, business and gainful employment.

Socio-economic Status: Socio-economic status was determined as per the classification devised by B.G. Prasad on the per capita income of the family. The modified classification for the year 2008 was used for determining the socio-economic status of mothers under survey. (7)

RESULTS

Table 1: Distribution of Study Population of Infant by Time of starting Breastfeeding

<table>
<thead>
<tr>
<th>Time of starting Breastfeeding</th>
<th>Institutional</th>
<th>Home</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>217</td>
<td>6 (25%)</td>
<td>223</td>
</tr>
<tr>
<td>12 hrs</td>
<td>95 (25.26%)</td>
<td>7</td>
<td>102</td>
</tr>
<tr>
<td>24 hrs</td>
<td>46 (12.23%)</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>&gt;48 hrs</td>
<td>2 (0.53%)</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>376</td>
<td>24</td>
<td>400</td>
</tr>
</tbody>
</table>

Out of 400 infants, 223 has started breastfeeding immediately in which 217 were institutional delivery and 6 were home. 102 infants started breastfeeding within 12 hrs followed by 48 infants within 12-24 hrs 21 and 6 infants started breastfeeding within 24-36 & 36-48 hrs respectively.

Table 2: Distribution of Study Population of Infant according to the reason for their delayed breastfeeding

<table>
<thead>
<tr>
<th>Reason</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>delayed lactation</td>
<td>92</td>
<td>51.98</td>
</tr>
<tr>
<td>Child illness</td>
<td>37</td>
<td>20.9</td>
</tr>
<tr>
<td>Cultural belief</td>
<td>17</td>
<td>9.6</td>
</tr>
<tr>
<td>Mother illness</td>
<td>13</td>
<td>17.51</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>100</td>
</tr>
</tbody>
</table>

Among 177 infants of having delayed breastfeeding, in maximum cases that is 92 (51.98%) reason is delayed lactation followed by child illness in 37 (20.90%), then cultural belief in 17 (9.60%) cases and rest 13 (17.51%) are due to mother illness.

Table 3: Distribution of Study Population of Infant by type of breastfeeding

<table>
<thead>
<tr>
<th>Type of breastfeeding</th>
<th>No.</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>on demand</td>
<td>365</td>
<td>91.25</td>
</tr>
<tr>
<td>on schedule</td>
<td>35</td>
<td>8.75</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

Out of 400 infants breastfeeding given on demand were 365 (91.25%) and rest 35 (8.75%) were on scheduled feeding.

Among the 400 infants, 365 were on demand. Out of 365, 136 (91.82%) were illiterate followed by 82 (86.32%), 69 (93.24%), 44 (97.78%), 20 (90.91%) & above and rest 14 (87.50%) were in primary school, middle school, secondary, graduate and in higher secondary respectively.
Table 4: Distribution of the study population of the infant by the type of breastfeeding in relation with literacy status of the mother

<table>
<thead>
<tr>
<th>Literacy Status</th>
<th>No.</th>
<th>On Demand</th>
<th>Schedule</th>
</tr>
</thead>
</table>
| Illiterate      | 148  | 136       | 12 (8.11%)
|                 |      | (91.82%)  |          |
| Primary         | 95   | 82 (86.32%)| 13 (13.68%)
| Middle          | 74   | 69 (93.24%)| 5 (6.76%) |
| Secondary       | 45   | 44 (97.78%)| 1 (2.22%) |
| Higher Secondary| 16   | 14 (87.50%)| 2 (12.50%)|
| Graduate & Above| 22   | 20 (90.91%)| 2 (9.09%) |
| Total           | 400  | 365       | 35       |

DISCUSSION

In this study, maximum 223 (55.75%) mothers started breastfeeding immediately after delivery followed by 102 (25.50%) mothers who fed their newborn within 12 hours, only less than 18% mothers started breastfeeding after 12 hours and 100% started within 48 hours of delivery. A significant variation was also seen in the time of starting breastfeeding between home and institutional deliveries. Where maximum number 217 (57.71%) of mothers with institutional deliveries started breastfeeding immediately while Only 25% mothers with home deliveries were started breastfeeding immediately. In a study carried out by Abhay et al, out of the 384 enrolled mothers (13), only 125 (32.56%) mothers breastfed their newborn within 1 hour after their deliveries. Similarly, Wadde et al in his study showed that only 76 (24.84%) mothers initiated breastfeeding within half an hours of delivery (14) whereas Batal et al, 55.9% mothers started breastfeeding their newborns within a few hours after birth. (15)

According to NFHS (2005-2006), only 23.4% of newborn babies were put on breastfeeding within one hour of birth only 37% of mother initiated breastfeeding within one day. (16) Dinesh Kumar et al observed in his study that 58.9% initiated breastfeeding within 6 hours of birth. (17) Madhu et al in his study showed that 97% of the mother initiated breastfeeding within one hour. (18) Dongre et al reported that majorities’ 61.6% newborn babies had received breastfeeding within half an hours. (19) Apurba Sinhababu et al with early initiation to breastfeeding (13.6%) (20) DevangRava et al 38.1% of newborns received breastfeeding within hour (21) Yadvenankar et al, Almost all mothers breastfed their child, 23.3% of mothers had initiated breastfeeding within four hours of delivery. (22) Raghavan Renitha et al observed that in 90.1% initiation of breastfeeding was within 24 hours of birth and in 44.4%, it was within the first hour of life. (23) Vyashshaili et al conducted a study on the majority of children were breastfed (93.6%). breastfeeding within an hour of delivery was practiced by only a few mothers (21.37%). (24)

In the present study, the reason of delayed breastfeeding in maximum 92 (5198%) cases was delayed breastfeeding followed by child illness 37 (20.90%) followed by mothers illness 31 (17.51%), other reasons area cultural belief in 17 (9.60%) cases.

In present study, exclusive breastfeeding up to six months was done by 212 (53%) mothers and rest that is 188 (47%) were given supplementary feed along with breastfeeding, the same pattern of results reported by Apurba et al found in their study that exclusive breastfeeding under six months was 57.1%. (20) Raghavan et al found 58.1% were exclusively breastfed for six months. (23) Star Pala et al with respect to feeding practices found that 59% mothers had given exclusive breastfeeding for a period of 6 months. (25) While Wadde SK et al reported only 28.43% of mothers followed exclusive
breastfeeding. (14) Dayh et al found that 12% mothers practiced EBF until the age of 6 months. (26)

In the present study there were significant associations between literacy level of mother and practice of exclusive breastfeeding found, also there was a significant association between occupation of mother and practice of exclusive breastfeeding observed but there is no any significant association found between socioeconomic status and religion of mothers. WaddeS.K and Yadav.V observed that 26 (20.16%) of 129 home-delivered mothers do not practice exclusive breastfeeding. Wadde et al in his study observed that 34.46% of hospital delivered mothers practiced exclusive breast feedings it was also found that out of 306 mothers enrolled in the study, 66.01% were illiterate, very less no of illiterate mothers followed exclusive breastfeeding as compared to literate mothers. (7)Yadvenankar et al reported in his study that 25% mothers who have studied up to the college level have practiced breastfeeding. (22)

In the present study, breastfeeding mainly practiced was on demand 365(91.25%), as compared to on schedule in 35 (8.75%) cases. Similar finding was observed by Waddeet al in his study that shows 90.52% mothers followed demand feeding. In a study by Bhardwaj et al, demand breastfeeding was practiced by all the mothers included in the study. Nitin Joseph et al Demand feeding was practiced by 87.1% mothers. (27) Results suggested that out of 148 illiterate mothers, 136(91.82%) were given on demand breastfeeding, as compared to mothers educated up to a primary level who were given on demand breastfeeding in 86.32%.

Thus this type of welfare programmes become more successful when a more focal point on to improve socioeconomic determinant of health. This will not only help to reduce the lumber on the health systems to treat sick new born babies but also has the impending to construct our children develop well and have reverberation development.

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