Original Research Article

Study of breastfeeding practices and problems among postnatal mothers: a hospital based study

Pooja J. Mise1*, Aditya J. Mise2, Sangamesh J. Mise3, Margol Siddappa4

1Department of Obstetrics and Gynecology, Gulbarga Institute of Medical Sciences, Kalaburagi, Karnataka, India
2Department of PSM, Karnataka Institute of Medical Sciences, Hubli, Karnataka, India
3Department of General Surgery, Mahadevappa Rampure Medical College, Kalaburagi, Karnataka, India
4Department of Medicine, Gulbarga Heart Foundation, Kalaburagi, Karnataka, India

Received: 11 July 2017
Accepted: 15 July 2017

*Correspondence:
Dr. Pooja J. Mise,
E-mail: poojasiddum@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Breastfeeding has many health and developmental advantages for infant and mothers. Breastfeeding remains the simplest, healthiest and least expensive feeding method that fulfills the infant’s needs.

Methods: 112 mothers having infants of age group less than 1 year were included in the study. Self-administered questionnaire was used to collect information on breastfeeding practices in the initial six months of birth of the child. Study population were postnatal mothers in KIMS Hubli, Hospital IPD and OPD.

Results: 112 lactating mothers were included in the study. Majority of subjects 86 (76.7%) were in the age group 21-30 years. About 43 (38.4%) lactating mother initiated breast feeding practices within 1 hour after the delivery. 63.4% of the infants received exclusive breast feeding. Lactation failure 40% and unsatisfactory growth of baby 50% were the main reasons for early weaning. Most common cause of delay in initiation in breast were caesarian section and delivery complication (53.12% and 21.88% respectively) Only 27 (24.1%) babies were given pre-lactal feed.

Conclusions: There is a need of giving information regarding breast feeding during antenatal visits to inform the mothers regarding proven facts of advantages of exclusive breastfeeding, as undesirable cultural practices such as giving pre-lacteals, late initiation of breast feeding are still prevalent among the community and these should be discouraged. For successful feeding, mothers need active support, care and privacy during pregnancy and following birth, not only of their families and communities but also of the entire health system.

Keywords: Colostrum, Exclusive breastfeeding, Postnatal, Pre-lactal feeds, Weaning

INTRODUCTION

Breast feeding is the first fundamental right of the child. It provides a unique biological and emotional basis for the health development of the children.

It offers infants and young children complete nutrition, early protection against illness and promote growth and development of the baby. Early initiation of breast feeding lowers the mother’s risk of postpartum haemorrhage and anaemia.

The beneficial effect of breastfeeding depends on breastfeeding initiation, its duration, and age at which the breast-fed child is weaned. Breastfeeding practices vary among different regions and communities. In India breastfeeding practices are influenced by rural and urban residence, cultural, socio-economic factors, psychological status, religious value and literacy especially low level of mother’s education, mother’s employment. As per WHO’s recommendation breast milk alone is sufficient to meet the infant’s nutritional requirements for the first 6 months of life. The world health organization

August 2017 · Volume 6 · Issue 8 · Page 3343
recommends that breastfeeding be initiated within 1 hr of birth. Early initiation of breastfeeding provides benefits for both mother and the baby.\textsuperscript{1,2} The baby friendly hospital initiative (BFHI) was designed to promote early initiation of breastfeeding preferably immediately after the birth.

Exclusive breastfeeding for the first 6 months of life and timely introduction of weaning food is important for laying down proper foundations of growth in later childhood.\textsuperscript{3,4}

Pregnancy and post-partum period is time of great transition in women’s life. It is complex to understand relationship between post-partum care breastfeeding and infant wellbeing.

Health outcomes in developed countries differ substantially for mothers and infants who formula feed compared with those who breastfeed. For infants, not being breastfed is associated with an increased incidence of infectious morbidity, as well as elevated risks of childhood obesity, type 1 and type 2 diabetes, leukemia, and sudden infant death syndrome. For mothers, failure to breastfeed is associated with an increased incidence of premenopausal breast cancer, ovarian cancer, retained gestational weight gain, type 2 diabetes, myocardial infarction, and the metabolic syndrome.\textsuperscript{5,6} Obstetricians are uniquely positioned to counsel mothers about the health impact of breastfeeding and to ensure that mothers and infants receive appropriate, evidence-based care, starting at birth.

By assessing the knowledge, attitude and practices of lactating mothers regarding their child’s feeding, an overview can be obtained about the areas which need modifications and hence specific intervention strategies can be made to correct the same.\textsuperscript{7,8}

METHODS

Study population: Study population were postnatal mothers attending OPD and IPD KIMS Hubli Hospital. Sample size: Sample of 112. Sampling method: Convenient sampling. Study area: KIMS Hubli Karnataka. Study duration: Study was conducted for duration of 1 month.

Inclusion criteria

Postnatal mothers of sex and age group less than 1 year were included in the study.

Exclusion criteria

Infants who had chronic illness, mental disorders, and those mothers who were reluctant to give consent for the interview were excluded.

Method used: Semi-structured questionnaire consisting of 32 questions was prepared. Information regarding exclusive breastfeeding early initiation of breastfeeding, prevalent methods of infants feeding practices were studied.

Statistical analysis

The data was analysed using SPSS 17.0 to derive percentages, proportions and chi-square tests.

RESULTS

The present study carried out in KIMS Hubli Hospital included a total 112 lactating mothers having children less than 1 year. Majority of the mothers (76.7\%) studied belong to age group 21-30 years.

Table 1: Distribution of mother age.

<table>
<thead>
<tr>
<th>Age of mothers (years)</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>22</td>
<td>19.6</td>
</tr>
<tr>
<td>21-30</td>
<td>86</td>
<td>76.7</td>
</tr>
<tr>
<td>31-40</td>
<td>4</td>
<td>3.7</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100</td>
</tr>
</tbody>
</table>

Among them majority of the study population is literate up to secondary schooling followed with primary schooling and graduates. 90.2\% of study population is graduated predominantly secondary schooling. 9.8\% of lactating mothers were illiterate. Only 8.9\% of the cases belong to poor and BPL category. Moreover, 76\% of the mother belong to high and upper middle group of socioeconomic status. 60.7\% of the study people come from urban areas and only 39.3\% come from rural areas.

Table 2: Distribution of cases according to exclusive breastfeeding.

<table>
<thead>
<tr>
<th>Exclusive breast feeding</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>41</td>
<td>36.6</td>
</tr>
<tr>
<td>Yes</td>
<td>71</td>
<td>63.4</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

63.4\% of infants received exclusive breastfeeding way about the national average of 46.3\%.\textsuperscript{9}

Table 3: Distribution of cases according to type of feeding.

<table>
<thead>
<tr>
<th>Type of feeding</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>On demand</td>
<td>68</td>
<td>60.7</td>
</tr>
<tr>
<td>Scheduled</td>
<td>44</td>
<td>39.3</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

60.7\% of the infants received breast milk on demand basis and 39.3\% thought that breastfeeding should be given at scheduled time.
Table 4: Distribution of cases on opinion on time of exclusive breastfeeding.

<table>
<thead>
<tr>
<th>Time (in months)</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>2.7</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>6.3</td>
</tr>
<tr>
<td>6</td>
<td>83</td>
<td>74.1</td>
</tr>
<tr>
<td>&gt;6</td>
<td>15</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Majority (74.1%) cases have an opinion that exclusive breastfeeding should be continued up to 6 months of age.

Table 5: Distribution of cases on time of initiation of breastfeeding.

<table>
<thead>
<tr>
<th>Time (in hours)</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>43</td>
<td>38.4</td>
</tr>
<tr>
<td>4</td>
<td>34</td>
<td>30.4</td>
</tr>
<tr>
<td>24</td>
<td>13</td>
<td>11.6</td>
</tr>
<tr>
<td>48</td>
<td>12</td>
<td>10.7</td>
</tr>
<tr>
<td>72</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>&gt;72</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

38% of the cases initiated breastfeeding within 1 hour of delivery, 30.4% after 4 hours and 11.6% on the 1st day.

Table 6: Distribution showing whether mothers fed colostrum or not.

<table>
<thead>
<tr>
<th>Colostrum feeding</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>13</td>
<td>11.6</td>
</tr>
<tr>
<td>Yes</td>
<td>99</td>
<td>88.4</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Majority of mothers (88.4%) fed their children with colostrum.

Table 7: Distribution of cases based on type of pre-lacteal feeds.

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No prelacteal</td>
<td>85</td>
<td>75.9</td>
</tr>
<tr>
<td>Cow milk</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>Honey</td>
<td>16</td>
<td>14.3</td>
</tr>
<tr>
<td>Sugar water</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Water</td>
<td>4</td>
<td>3.6</td>
</tr>
</tbody>
</table>

It was observed that 75.9% of the lactating mothers did not believe in giving pre-lacteal feeds. 14.3% mothers used honey as pre-lacteal feeds followed by cow’s milk. The percentage of mothers from rural area who gave pre-lacteal feed was relatively more than urban counterparts.

Majority (64.3%) of the cases started weaning practices at 6 months and 24.1% at 1 years of age. There is no much effect of socio-economic status on weaning practices.

Table 8: Distribution of cases showing time of initiation of weaning.

<table>
<thead>
<tr>
<th>Time (in months)</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>3</td>
<td>2.7</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>8.9</td>
</tr>
<tr>
<td>6</td>
<td>72</td>
<td>64.3</td>
</tr>
<tr>
<td>12</td>
<td>27</td>
<td>24.1</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Lactation failure and unsatisfactory growth of baby were the main reasons for early weaning.

Table 9: Reasons for early weaning.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactation failure</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Maternal illness</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Failure to thrive</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

DISCUSSION

According to our study majority (68.4%) of mothers put their babies to breast within 1hr to 4 hrs. Literacy status does not have much effect on the time of initiation of breastfeeding. The effect of socio-economic status on initiation of breastfeeding could not be evidenced significant ($\Phi^2=13.793$, $DF=20$, $p>0.05$).

In a study conducted in Aligarh, by MA Ansari et al. breastfeeding was started between half to 5hr by majority of the mothers. In a study by Alok Kumar et al only less than half of total interviewed mothers were able to initiate breastfeeding within 24hrs of birth.

The study conducted in Aligarh, by Ansari MA et al. reveals that literacy status had little impact on initiation of breastfeeding. However, an early initiation was observed in comparatively more educated mother. Alok Kumar et al in their study reiterated the same findings.

In a study conducted by Faizabad, by Tiwari V at al. the effect of socio-economic status on initiation of breastfeeding could not be evidenced significant ($\Phi^2=1.614$, $DF=2$, $p<0.01$).

In our study, an overwhelming majority (88.4%) of mothers fed their children with colostrum, more over a cent percent of graduate mothers fed their children with colostrum. We found that honey (14.3%) was the most pre-lacteal feed, followed by cow milk (4.5%).

In a study conducted in Faizabad, by Tiwari V et al. majority of mothers did not discard colostrum and they fed it to their children. Also, the study suggested that the
enhancement in maternal literacy may be proved helpful to initiate breastfeeding as earliest as possible, and practice of colostrum feeding by them.12

Mandal PK et al. in their study also found that 71.7% infants were given pre-lacteal feeds. Among pre-lacteal feeds honey (25%) was commonest followed by other substances like water (18%) etc.13

In our study, the rates of exclusive breast feeding were found at 88.4%. According to our study, 26.6% of mothers resorted to top feeds for their children along with breastfeeding. In a study conducted in rural Karnataka, by H.B. Mallikarjun et al. 25.6% of mothers had resorted to top feeds for ‘better growth of the child’ during 5-6 months of age.14

In a study by Shiva F et al the percentage of infants being exclusively breast fed fell from 90% at 1 month, to around 83% at 6 months. According to NFHS-3 exclusive breastfeeding in children under 6 months is only 46.4%.15 According to our study, in majority of infants that we studied, weaning was started at 6 months (64.3%). in our study, only 8.9% of the mothers started weaning their children early, out of whom 5 mothers (50%) cited unsatisfactory growth of the child, followed by lactation failure (40%) as the reason for early weaning.

In a study by Shiva F et al, the majority of infants studied, the weaning process was started around 3 months of age.15 In a study in rural West Bengal by Mandal PK et al. It was revealed that ‘lactation failure’ was the commonest (71.6%) reason for complimentary feeding as started by the mothers followed by unsatisfactory growth of the child ‘Mothers illness’ etc.

CONCLUSION

Breastfeeding is observed to be a universal practice in the study area and accepted to be healthiest food for infants. The effect of literacy status of mothers on breastfeeding practices is not very evident. Healthy breastfeeding practices has significant effect on mothers and infants.

**Funding: No funding sources**

**Conflict of interest: None declared**

**Ethical approval: The study was approved by the Institutional Ethics Committee**

**REFERENCES**


