

(RESEARCH ARTICLE)



## Breastfeeding practices in urban primi mothers in the field practice area of Department of Community Medicine-a cross-sectional study

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### Abstract

**Introduction:** Breastfeeding is the unique source of nutrition which plays a significant role in the growth, development and survival of infants. Breastfeeding is promoted internationally as the preferred method to feed infants up to 6 months and has continued up to 2 years with the addition of home-cooked foods.

**Objectives:** To assess the Knowledge, Attitude and Practices of lactating mothers regarding breast feeding. To correlate the exclusive feeding practices with maternal employment and gender of the child.

**Materials and Methods:** A cross-sectional survey was conducted in the urban field practice area of UHTC, Dholabhata, Ajmer. Out of 8 Anganwadi centers 4 were randomly selected. 219 lactating mothers have been recorded at some Anganwadi sites. Subsequent to the inclusion and exclusion criteria, 200 samples were collected for the study. A semi-structured questionnaire was used for this study.

**Important findings:** Out of 200 lactating mothers, 74.6% had a knowledge of the benefits of breastfeeding that the child remains healthy. 71.5% agreed that it fosters a close bond between the mother and child. 56.7% of mothers breastfed to six months.

**Conclusion:** Both governmental and non-governmental organizations are already involved in promoting breastfeeding. But more promotional activities should be done just not for health workers in the ante- natal and post-natal/child unit but also other staff should be encouraged to participate in such programs.

**Keywords:** Knowledge; Attitude; Practices; Breast Feeding; Exclusive feeding

### 1. Introduction

Breast feeding is the most precious gift a mother can give her infant. Breastfeeding is the unique source of nutrition which plays a significant role in the growth, development and survival of infants. Breastfeeding is promoted internationally as the preferred method of feeding infants up to 6 months and continued up to 2 years with the addition of home cooked food<sup>1</sup>.

The benefits of breastfeeding especially exclusive breastfeeding are well established, particularly in poorer environments where the early introduction of other milk is of particular concern because of the risk of contamination and over dilution of milk leading to increased risks of morbidity and under nutrition<sup>2</sup>.

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Exclusive breastfeeding includes initiating breastfeeding of the child within an hour of birth and continue till six months of age without supplemental bottle-feeding<sup>3</sup>.

Semisolid foods are recommended to be introduced after 6 months of age while breastfeeding is continued to meet the increased physiological requirements of the growing infant<sup>2</sup>.

So this study is aimed to assess knowledge, attitude and practices among primi mothers towards exclusive breast feeding as these women seek all information either through Anganwadi Centres, from elder members of family, feeding practices in their culture.

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## 2. Materials and Methods

A cross-sectional, questionnaire based study conducted in registered Anganwadi Centres in urban field practice area of UHTC, Dholabhata under Department of Community Medicine, J.L.N. Medical College, Ajmer. The study population consisted of breastfeeding mothers with children under the age of two. Informed consent was obtained from mothers who were willing to participate in the study and interviewed with respect to breastfeeding practices. The study was initiated following approval by the institution's ethics committee. Total duration of study was 16 months (March 2018 to June 2019).

### 2.1. Sample size estimation

The sample size was estimated on basis of the National Family Health Survey-4, carried out in 2015-16, showed the rate of Exclusive breast feeding (0-6 months) in India (urban area) as 52.1%. Assuming the prevalence rate of exclusive breast feeding of 52%, at 95% confidence level and 15% allowable error, the sample size is estimated to be 164. After adding to meet the non-response error of 15%, an additional 25 subjects are included, so the total sample size shall be  $164+25=189$  subjects. Therefore, 189 (minimum number of sample is required). To round off the sample size, it was decided to study 200 lactating mothers.

### 2.2. Data collection

House to house survey was done for study purpose. A face-to-face interview using a Semi-structured questionnaire regarding knowledge, attitude and practices of breastfeeding was conducted.

- **Inclusion Criteria:** Registered lactating mothers from selected Anganwadi Centres with children below 2 years of age who gave consent for the study.
- **Exclusion Criteria:** Conditions where breastfeeding is contraindicated Galactosemia and mother suffering from cancer, psychosis, Twin/Triplet pregnancies were excluded from the study.

### 2.3. Statistical Analysis

Data entry and statistical analysis was performed by using of Microsoft Excel and Epi Info7. Frequency and percentage were used to analyze social demographics and to evaluate the level of knowledge, attitude and practice regarding breastfeeding. Chi-square was used to determine the association between breastfeeding practices of nursing mothers and socio-demographic variables.  $P < 0.05$  was found to be statistically significant at a 95% confidence level.

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## 3. Results

**Table 1** shows distribution of lactating mothers regarding knowledge of breast feeding, 149 mothers (74.6%) were aware of the benefits of breastfeeding and that the child remained healthy. Very few mothers 1 (0.3 per cent) were aware of how to feed twin babies. None of the mother's in this study had knowledge about fore milk and Hind milk. About 140 (70.0%) mothers agreed that breast milk is the best milk, 12 (5.8) mothers knew it gives natural immunity, 8 (4%) agreed that it is pure and cost nothing, 56 (27.9%) knew it is more nutritious and hygienic, 4 (2%) mothers knew that it improves growth and development, 45 (22.4 %) knew about lactational amenorrhoea as a natural method of contraception.

**Table 1** Distribution of lactating mothers regarding knowledge of breast feeding

Knowledge	No. of cases*	Percentage
Child remains healthy	149	74.6
More nutritious and hygienic	56	27.9
Gives natural immunity	12	5.8
Helps in preventing further conception	45	22.4
Pure and cost nothing	8	4
Mother milk is the best milk	140	70.0
Improves growth and development	4	2
No response	25	12.7
Fore milk and Hind milk	0	0
Feeding of twin babies	1	0.3

(\*Multiple responses)

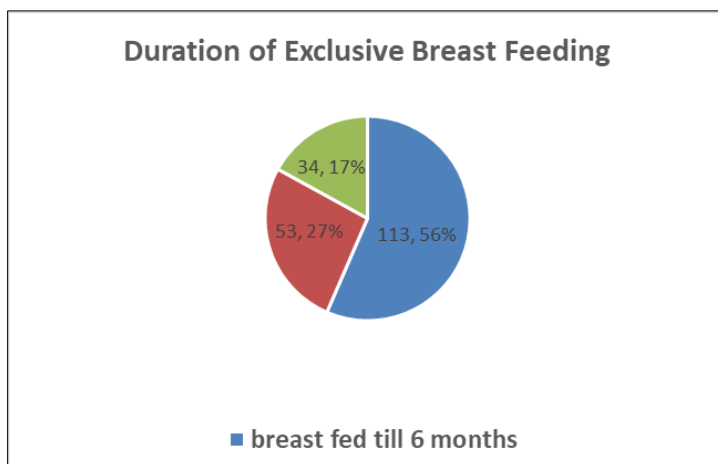
Table 2 shows attitude of lactating mothers towards breast feeding, it shows that 143 (71.5%) women agreed that it promotes a strong connection between mother and child. Only 11 (5.25%) felt that breastfeeding is old fashioned while it leads to loss of figure was felt by 3 (1.25%) mothers, 135 (67.5%) mothers agreed that breast milk is the best milk, 10 (5.0%) agreed it is pure and cost nothing, 9 (4.25%) of mothers felt that breastfeeding in public was embarrassing and 11 (5.5%) of mothers felt that breast feeding prevents going to work.

**Table 2** Distribution of lactating mothers regarding attitude towards breast feeding

Attitude	No. of cases*	Percentage
Breastfeeding leads to loss of figure	3	1.25
Breastfeeding is old fashioned	11	5.25
Breast milk is the best milk	135	67.5
Breast milk is pure and cost nothing	10	5.0
Breast milk fosters close bond between mother and child	143	71.5
Breastfeeding in public is embarrassing	9	4.25
Breastfeeding prevents going to work	11	5.5

(\*Multiple responses)

Fig 1: shows distribution of lactating mothers regarding duration of exclusive breastfeeding, out of 200 lactating mothers, majority 113 (56.7%) mothers have breastfed exclusively till 6 months followed by 53 (26.5%) of mothers for less than 6 months and remaining 34 (16.8%) for more than 6 months.



**Figure 1** Distribution of lactating mothers regarding duration of Exclusive breast feeding

Table 3 shows association between employment status of mothers & exclusive breastfeeding, it shows that out of 200 lactating mothers, 8 (3.9%) mothers were employed, among which 3 (37.4%) mothers exclusively breastfed their children and remaining 192 (96.1%) were housewives, among which 110 (57.5%) mothers exclusive breastfed their children. Employment status of mother did not show statistically significant association with exclusive breast feeding.

**Table 3** Association between employment status of mothers and exclusive breastfeeding

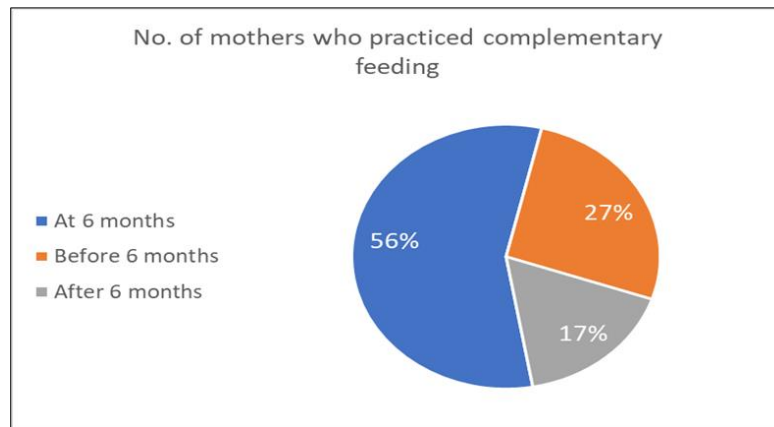
Employed	EBF Yes N%	EBF No N%	Total N%
Yes	3 (37.4)	5 (62.6)	8 (100)
No	110 (57.5)	82 (42.5)	192 (100)
Total	113 (56.5)	87 (43.5)	200 (100)
Statistical Test	Chi Sq=1.224		P- Value=0.268

Table 4 shows association between gender of child and exclusive breastfeeding, out of 200 lactating mothers, 113 of mothers practiced of exclusive breast feeding to their children, among which 70 (61.9%) were male and 43 (38.1%) were female babies. Of the total, 87 mothers did not practiced of exclusive breast feeding, among which 37 (42.5%) were male and 50 (57.5%) were female. Association between gender of child and exclusive breastfeeding was found to statistically significant.

**Table 4** Association between gender of child and exclusive breastfeeding

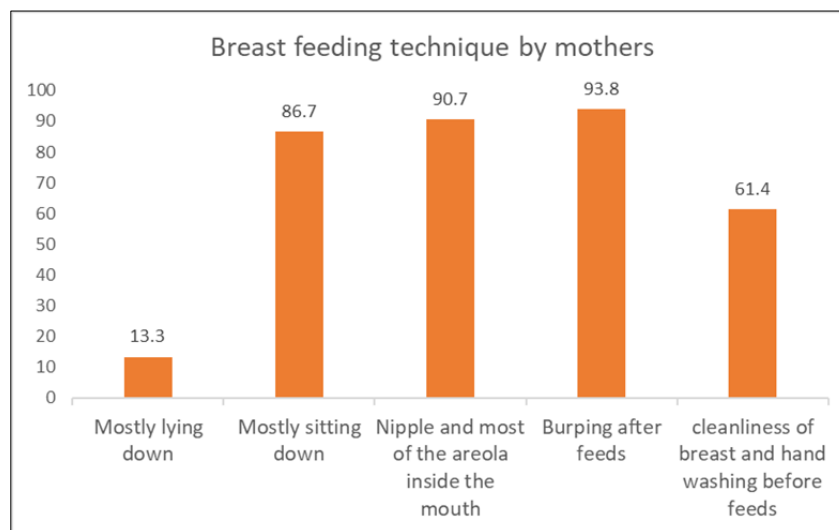
Exclusive breast feeding	Male N%	Female N%	Total N%
Yes	70 (61.9)	43 (38.1)	113 (100)
No	37 (42.5)	50 (57.5)	87 (100)
Total	107 (53.5)	93 (46.5)	200 (100)
Statistical Test	Chi Sq=7.4504		P Value=0.0063

Fig.2 :Shows distribution of lactating mothers regarding complementary feeding practices that out of 200 lactating mothers, majority 113(56.7%) of mothers started weaning at 6 months followed by 53(26.5%) of mothers in less than 6 months and only 34(16.8%) of mothers in more than 6 months.



**Figure 2** Distribution of lactating mothers regarding complementary feeding practices

Fig.3 shows distribution of lactating mothers regarding practices of breast feeding technique, it was good in most of the mothers. 173(86.7%) of mothers fed their infants mostly in sitting position, 181(90.7%) mothers practiced to keep nipple and most of areola inside the mouth. 123(61.4%) mothers practiced of cleanliness of breast and hand washing before feed. 188(93.8%) mothers practiced of burping after feeds.



**Figure 3** Distribution of lactating mothers regarding practices of breastfeeding technique

#### 4. Discussion

In this study, the majority of the mothers had a sound knowledge and a positive attitude towards breastfeeding which they put into practice. 149(74.6 %) mothers had knowledge about the advantages of breast-feeding so that children remain healthy. Very few mothers, 0.3%, knew about the feeding of twin babies. None of the mothers in this study had knowledge of fore milk and hind milk. Similar findings were found in study done by Naseem et al<sup>9</sup> that majority 72.8% had knowledge about advantages of breastfeeding that child remains healthy. Very few mothers knew about feeding of twin babies, fore milk and hind milk.

In this study, 71.5% agreed that it fosters a close bond between the mother and child. Only 5.25% felt that breastfeeding is old-fashioned while it leads to loss of figure was felt by 1.25% of mothers, 67.5% of mothers agreed that breast milk is the best milk, 5.0% agreed it is pure and costs nothing, 4.25% of mothers felt that breastfeeding in public was embarrassing and 5.5% of mothers felt that breastfeeding prevents going to work. Similar findings were reported in studies conducted by Kar M et al<sup>11</sup>, Naseem et al<sup>9</sup> in tertiary care hospital of Hyderabad and Grover et al<sup>12</sup> in rural area of East Delhi.

In this study 56.7% mothers practiced of exclusive breast feeding to their children while studies done by Arage Get al<sup>6</sup>, Mise PJ et al<sup>4</sup>, Kumar L et al<sup>5</sup> found exclusive breast feeding rate of 70.8%, 63.4% and 86.8% respectively. In this study working status of mother did not show statistically significant association with exclusive breast feeding. Similar finding is reported in study conducted by Singh N et al<sup>8</sup>.

Exclusive Breastfeeding till 6 months was followed by only 56.7% of the mothers in our study. Out of those who had male babies, 61.9% were found to be exclusively breastfeeding while among those who had female babies, only 43(38.1%) were breastfeeding exclusively. Male children were more exclusively breastfed than female and the difference was found to be statistically significant. Similar findings were reported in studies conducted by Shashank KJ et al<sup>7</sup> and Singh N et al<sup>11</sup>.

In this study, 56.7% of mothers started weaning around 6 months followed by 26.5% of mothers in less than 6 months and only 16.8% of mothers in more than 6 months whereas Khan A et al<sup>10</sup> in their study found that 35.51% of mothers started weaning in less than 6 months followed by 34.69% of mothers started weaning around 6 months and only 29.78% of mothers in more than 6 months.

In this study 93.8% infants burped after feeds. Singh N et al<sup>8</sup> in their study found that 86.67% infants burped after feed which is similar to our study. Whereas study conducted by Benakappa et al<sup>13</sup> found that 58% infants burped after feed. The present study differ from other studies as majority of deliveries in this study were conducted in the hospital where they were counseled by doctors and nurses regarding breastfeeding advantages and its management. Burping helps to get rid of some of the air that babies tend to swallow during feeding. Not being burped often and swallowing too much air can make a baby spit up, or seem cranky or gassy.

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## 5. Conclusion

This study revealed that majority of the mothers had good knowledge and a positive attitude towards breastfeeding which they put into practice. Majority of mothers had favourable attitude towards breastfeeding. 67.5% mothers agreed that breast milk is the best milk for the infants. Weaning was started by 26.5% mothers before completion of 6 months of the child.

### *Recommendations*

Based on the findings of this study, since exclusive breastfeeding promotions improve infant survival it is recommended that, the fact that a large proportion of mothers practiced sub-optimal feeding practices after development of the national Infant and young child feeding (IYCF) guideline indicates the need for strengthening the behavior change communication on optimal IYCF practices. Exclusive breastfeeding for the first six months can still be achieved by appropriate IEC (Information, education and communication) activities targeting expecting and nursing mothers.

Government and non government organizations involve in the promotion of exclusive breastfeeding should organize more training programme for health workers in the ante- natal and post-natal/child welfare unit and staff should be encouraged to participate in such programmes, where they can update their knowledge with latest information on exclusive breastfeeding, since they constitute the greatest means of information dissemination on exclusive breastfeeding.

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## Compliance with ethical standards

### *Acknowledgments*

We sincerely thank all the study participants and Heads of the institutions.

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

### *Statement of ethical approval.*

This study was conducted after approval from Institutional Ethical Committee.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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