Original Research Article

Awareness, attitude and practice of breast feeding among mothers at tertiary care center, Puducherry, India

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Received: 04 June 2019
Accepted: 03 July 2019

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ABSTRACT

Background: The knowledge and practice of exclusive breastfeeding has been prejudiced by demographic, social, cultural, biophysical, and psychosocial factors. About two-thirds of under-five deaths in India are associated with inappropriate infant feeding practices. Objective of this study was to assess the awareness, knowledge and practice of breastfeeding among the mothers attending to the tertiary care institute at Puducherry, India.

Methods: This hospital-based, cross-sectional study was carried out among 150 postnatal mothers who attended immunization clinics, post-natal and paediatric wards at the tertiary care hospital at Puducherry collecting data about breastfeeding knowledge and practices using a structured interview.

Results: The breastfeeding practices were significantly poorer in terms of initiation, feeding colostrums, timing and frequency of feeding and inclusion of pre-lacteal feeds among obese women compared to the normal weighted mothers. The breastfeeding knowledge and attitude was healthy among the mothers as depicted by the awareness of nutritive value of breast milk by majority (84%) of mothers.

Conclusions: The mothers had poor knowledge regarding initiation of breastfeeding and administration of colostrum. There was a positive attitude about exclusive breastfeeding, frequency of feeding and social aspects of breastfeeding.

Keywords: Attitude, Awareness, Breastfeeding, Knowledge

INTRODUCTION

“A newborn baby has only three demands. They are warmth in the arms of its mother, food from the breasts, and security in the knowledge of her presence; breastfeeding satisfies all three.” Breastfeeding has been emphasized as a social responsibility starting from every mother. In 2002, the World Health assembly passed a resolution as exclusive breast feeding should be continued till the age of six months and weaning to be started after six months of age with complementary foods for up to two years of age or beyond.

Breastfeeding has various advantages which includes provision of calories, proteins, and bioactive factors such as IgA, lactoferrin, K-casein, cytokines, growth factors, glutathione and peroxides, which have anti-infective, antioxidant, and growth-promoting properties.3 Inspite of the cost-effectiveness and availability of breastmilk, among 2.4 million under-five deaths in India each year, two-thirds are associated with inappropriate infant feeding practices.4 Promotion of exclusive breastfeeding by increasing awareness about breastfeeding can cause 13% reduction in the infant mortality rate.5

The knowledge and practice of exclusive breastfeeding has been prejudiced by demographic, social, cultural, biophysical, and psychosocial factors.6 This study aims at assessment of breastfeeding awareness among the mothers attending to the tertiary care institute and their willingness towards adoption of correct feeding practices and barriers faced towards its implementation.
METHODS

This hospital-based, cross-sectional study was carried out among postnatal mothers who attended immunization clinics, post-natal and pediatric wards at the tertiary care hospital at Puducherry. The Mothers who were having children <6 months of age were randomly included in the study. Those participants who refuse to give informed consent; babies with congenital anomalies like cleft lip and cleft palate, extreme low birth weight, multiple gestations, NICU admitted babies were excluded from the study. Informed written consent was taken from each of the participants. A total of 150 postnatal mothers were included in the study. Ethical approval was obtained before the commencement of the study.

A pre-tested, semi-structured questionnaire was used to collect data from the mothers regarding socio-demographic variables, type and mode of delivery, childbirth weight, knowledge, attitude, and practices of breastfeeding. The knowledge regarding the breast feeding duration, frequency, bottle-feeding, use of pacifiers, pre-lacteal feeds, knowledge about advantages of breast milk and social issues about breastfeeding were included. The collected data was recorded in a proforma and the mothers were educated regarding correct feeding practices and advantages of breastfeeding.

Statistical analysis

Data entry was done using Microsoft excel 2010 and analysed using SPSS version 20.0. The descriptive parameters are represented as frequencies and percentages. The chi-square test was used for assessing the significance of breast feeding practices and various independent variables of interest. The p - value less than 0.05 was considered statistically significant.

RESULTS

The mean age of the mothers included in the study was 26.7±2.8 years. Among them 23.3% were educated up to middle school, 32.7% till higher secondary, 41.3% were degree holders and 2.7% were illiterates.

Majority (74.5%) were belonging to the middle socio-economic class. The proportion of female children was higher (56%) compared to the male children (44%). Preterm deliveries were 10% compared to majority of normal term deliveries 90%.

### Table 1: Differences in breastfeeding practices between obese and non-obese mothers.

| Breast Feeding Practice                  | Obese (n=66) | Normal (n=84) | P value* |
|----------------------------------------|--------------|--------------|----------|
| Initiation of breastfeeding first half an hour | 24 (36.4)    | 68 (81)      | <0.001   |
| Duration of breastfeeding              |              |              |          |
| < 5 minutes                             | 39 (59.1)    | 22 (26.2)    | <0.001   |
| >5 minutes till baby sleep             | 27 (40.9)    | 62 (73.8)    | <0.001   |
| Exclusive breastfeeding                | 53 (80.3)    | 78 (92.6)    | 0.02     |
| Type of feeding                        |              |              |          |
| Demand feeding                         | 22 (33.3)    | 65 (77.4)    | <0.001   |
| Scheduled feeding                      | 44 (66.7)    | 19 (22.6)    | <0.001   |
| Pre-lacteal feeds                      | 39 (59.1)    | 22 (26.2)    | <0.001   |
| Colostrum given                        | 25 (37.9)    | 52 (61.9)    | 0.03     |

The incidence of caesarean deliveries was higher (81.3%) compared to normal vaginal births (18.7%). The average birth weight of the children was 2.94±0.78 kilograms and incidence of low birth weight was 11.3%. The presence of obesity was (BMI>23.5 kg/m²) 44% (n=66) among the feeding mothers.

The following differences in breastfeeding knowledge and practices were encountered between the obese and normal weighted mothers (Table 1). The breastfeeding practices were significantly poorer in terms of initiation, feeding colostrums, timing and frequency of feeding and inclusion of pre-lacteal feeds among obese women compared to the normal weighted mothers.

The questions pertaining to assessment of attitude among the mothers about breastfeeding are summarized in (Table 2).

The breastfeeding knowledge and attitude was healthy among the mothers as depicted by the awareness of nutritive value of breast milk by majority (84%) of mothers.

The usage of pacifiers/artificial feeders was known as harmful by 64% of mothers. Among the working mothers (30%), 86.7% were positive towards expressed breast milk feeding and had a good knowledge regarding the procedure.
Table 2: Attitude among the mothers about breastfeeding (n=150).

| Characteristic                                      | n (%)  |
|-----------------------------------------------------|--------|
| Adequate nutrition of mother is necessary for breastfeeding | 126 (84) |
| My family members support me towards breastfeeding  | 110 (73.3) |
| I have a positive attitude or confidence when breastfeeding | 138 (92) |
| Using pacifiers/ artificial nipples is not healthy   | 97 (64) |
| Breastfeeding can be done by a working woman         | 45 (30) |
| Expressed breastmilk is an alternative for a working woman | 39 (26) |
| Breastfeeding is better than animal milk or artificial feeding | 129 (86) |
| Breastfeeding can be done in public places           | 55 (36.7) |

DISCUSSION

Awareness regarding correct breastfeeding practices is something a woman should possess even before the birth in the antenatal period which is the basis of instilling mother-craft classes during antenatal period for the pregnant women. This basically is very important not to miss the early initiation of breastfeeding within the first half an hour of birth and feeding colostrum. In the present study, the initiation of breastfeeding within first half an hour was found among 61.3% of the mothers. This proportion was lower compared to 80% in a study by Chinnasami et al, and higher than 39% in a study by Thomas et al, which clearly depicts that there is a huge gap in awareness about initiation of breastfeeding which further emphasizes the importance of antenatal mother education.7,8 The study also shows that colostrum was missed by 49% of the mothers. In the study by Bashir et al, 80.6% mothers were aware of that colostrum is essential for health which is very high when compared to the lower awareness about colostrum in this study.9

In the present study, 58% knew about breastfeeding on demand which is high as compared to 13% and 39.4%, respectively, in studies by Thomas et al, and Kumar et al.8,10 In the previous study by Bashir et al, only 27.7% were aware of giving only breastmilk during 1st 6 months.9 But this awareness regarding exclusive breastfeeding was higher (87.3%) in the present study. Similar proportion was reported (85.2%) in studies by Vijayalakshmi et al, and Ekanem et al.11,12 In the present study people had a very positive attitude towards breastfeeding and its nutritious effects on the child’s health. Feeding in public places and avoidance of prelactal feeds were some mentionable healthy practices among the mothers in our study which were not recorded in previous studies.

CONCLUSION

The study clearly showed that the mothers had poor knowledge regarding initiation of breastfeeding and administration of colostrum. There was a positive attitude about exclusive breastfeeding, frequency of feeding and social aspects of breastfeeding. The obese mothers had poor breastfeeding practices when compared to their normal weighted counterparts. The research clearly necessitates revamping the importance of ante-natal mother education about infant feeding practices and follow-up towards initiation of breastfeeding early in the first half an hour of postnatal period.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Dharmalingam A, Bhaskar C, Raghupathy NS. Awareness, attitude and practice of breastfeeding among mothers at tertiary care center, Puducherry, India. Int J Contemp Pediatr 2019;6:2108-11.