



Knowledge, Attitude and Practice of Expression of Breast Milk among Mothers in Western Maharashtra

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ABSTRACT

Introduction: Breastfeeding has many benefits for mother and infants. Successful breastfeeding is the first step towards good nutrition. But there are many hurdles for it, like breast related complications like Mastitis or a working mother. Such cases can be benefited by breast milk expression. Having knowledge and good attitude towards EBM is first step towards promoting practice of expression of Breast milk.

Objectives: 1. To study the level of knowledge and attitude of mothers towards expression of breast milk. 2. To study the pattern of expression of breast milk in them.

Methodology: A cross-sectional questionnaire based study was carried out amongst 95 mothers attending Tertiary care hospital in Miraj during August 2014.

Results: The analysis has indicated that every mother was not aware of the methods of breast milk expression. Correct knowledge about EBM was present in 89 (93.7%) participants; correct knowledge about technique of milk expression and storage of expressed breast milk was present in 17 (17.9%) and 34 (35.7%) of study participants. The prevalence of Breast milk expression was 17.9%. Most common cause for it was to relieve breast tenderness.

Conclusions: Breast milk expression should be promoted to avail its full benefits. Proper technique should be taught during ANC clinics.

Keywords: EBM, Breast feeding, KAP, Breastfeeding practices, Expression of Breast milk

Introduction

Breastfeeding has been accepted as the most vital intervention for reducing infant mortality and ensuring optimum growth and development of children. More than 15% of child deaths could be

averted in India by optimal breast feeding practices. Appropriate feeding practices are of fundamental importance for the survival, growth, development and health of infants and young children. ⁽¹⁾IYCF guidelines in India recommend

that a baby should be exclusively breastfed till 8 months and should receive breast milk minimum till 2 years of age.⁽²⁾

Though it's a natural process, breastfeeding success has many hurdles like Breast engorgement, mastitis, inadequate milk supply, working mothers, NICU admissions of neonates etc. For example, problems of latching are seen in 54.8% of cases and Problems for initiation of breast feeding are present in 5.65% in a study conducted by Ram C et al.⁽³⁾

Breast milk expression has proven to be helpful in establishing and continuing the breast feeding. Milk expression, byhand or with a pump device, may help mothers to overcome some obstacles to successful breastfeeding and, therefore, increase breastfeeding duration.⁽⁴⁾

Expressing and feeding breast milk is a qualitatively different experience from breastfeeding directly from the breast⁽⁵⁾. Although feeding expressed milk mitigates a few advantages of the nutritional components of the milk, even from a bottle, human milk feeding is superior for infants compared with infant formula.^(6,7) Most human milk feeding mothers in the United States now use breast pumps and bottles to provide human milk to their infants, with many doing so soon after delivery or at high frequency.⁽⁸⁾ But in India the practice of Expression of breast milk remains low.⁽⁹⁾ One of the main reasons for this may be the lack of adequate information and appropriate knowledge about Expression of breast milk.

It is thus of importance that all mothers should have adequate scientific knowledge about expression of breast milk so that she will be able to prevent / correct the problems if any and increase the milk supply to prevent malnutrition. Present study was planned to study the level of knowledge and attitude of mothers towards expression of breast milk and to study the pattern of expression of breast milk in them.

Materials and Methods

A cross-sectional questionnaire based descriptive study was carried out amongst females having a child of 2 yrs age. This group was selected to study the breast feeding pattern of the mother to minimize recall bias. Mothers accompanying the baby to the Govt. Medical College Hospital during August 2014 formed the sampling frame.

The Sample size was calculated by considering P value as 50% and allowable error as 10% and 95 mothers were included in the study.

Data was collected by exit interviews of women who fulfilled inclusion criteria. Permissions from appropriate authority were obtained to conduct the study and informed written consent was taken from all study participants.

A pretested semi-structured questionnaire was used. It included information regarding the socio-demographic information about the study participants and questions regarding knowledge, attitude and practice of breastfeeding and breast milk expression.

Any misconceptions found during the study were rectified by giving correct information to the study subjects at the end of interview.

The data analysis was done using Microsoft Excel 2010. Relevant descriptive statistics was calculated.

Results

The socio-demographic profile of the study subjects is shown in Table no 1.

Their age ranged from 18 to 32 years with an average of 24.45 (± 2.91) years. Majority 70 (73.68%) were Hindus. 59 (62.10%) were from urban area. Only 5 (5.76%) mothers were illiterate. The proportion of working mothers was found to be 10.52%.

Table No. 2 shows the presence of correct knowledge regarding certain important aspects of breastfeeding and about expression of breast milk. Though 89 (93.7%) mothers were aware of the practice of expression of breast milk, only 17 (17.9%) of them knew about availability of pumps for the expression of breast milk. Though

43(45.2%) of them knew how to express breast milk manually, the prevalence of expression of breast milk was found to be 17.9%. Majority 76(80%) knew the correct way to feed expressed breast milk to the baby. They were aware that bottle should not be used for this purpose.

Out of 89 participants who were aware of the expression of breast milk, 34 (38.2%) women knew that expressed milk can be stored safely. Only 4 (4.5%) of them were aware that it can be stored with or without refrigeration for different durations. The correct duration of storage of expressed breast milk at room temperature was known to only 2(2.24%) participants. Others thought it was as less as 10 minutes to 1 hour only.

As shown in the Chart No. 1, correct knowledge about EBM was present in 89 (93.7%) participants; correct knowledge about technique of milk expression and storage of expressed breast milk was present in 17 (17.9%) and 34 (35.7%) of study participants. (N=95)

Chart No. 2 shows the level of correct attitude towards expression of breastmilk among the study participants. It ranged from as low as 20% to 95.8% in various aspects.

History of practice of expression of breast milk was present in 17 (17.9%) participants. The reasons quoted by the participants are shown in chart No. 3. Most common reason was to relieve breast tenderness followed by the admission of the neonate in NICU.

Table No. 1: Socio demographic factors of mothers.

| Socio demographic factors | | No. (n =95) | % |
|----------------------------------|---------------|-------------|-------|
| Age distribution (age in yrs) | ≤ 25 | 32 | 33.68 |
| | 26 to 30 | 48 | 50.52 |
| | >30 | 15 | 15.78 |
| Religion | Hindu | 70 | 73.68 |
| | Muslim | 25 | 26.31 |
| Locality | Urban | 59 | 62.10 |
| | Rural | 36 | 37.89 |
| Literacy status | Illiterate | 5 | 5.26 |
| | Primary | 64 | 67.36 |
| | Secondary | 8 | 8.42 |
| | Graduate | 13 | 13.68 |
| | Post graduate | 5 | 5.26 |
| Working status | Working | 10 | 10.53 |
| | Nonworking | 85 | 89.47 |
| Type of family | Nuclear | 28 | 29.48 |
| | Joint | 67 | 70.52 |
| Socio-economic Status | I | 0 | 0 |
| | II | 4 | 4.21 |
| | III | 36 | 37.87 |
| | IV | 21 | 22.10 |
| | V | 34 | 35.78 |

Table No 2.Knowledge about important aspects of Breast feeding and Breast milk expression

| Factor | correct responses |
|---|-------------------|
| Time of initiation of BF | |
| After normal delivery | 85 (89.0%) |
| After caesarean section | 92 (96.7%) |
| Protective effect of colostrum | 95 (100.0%) |
| Knowledge of exclusive BF | 95 (100.0%) |
| Duration of exclusive BF | 88 (92.6%) |
| Knowledge of expression of breast milk | 89 (93.7%) |
| Methods other than manual expression of breast milk | 17 (17.9%) |
| Correct area on breast where fingers are to be place during manual expression | 43 (45.2%) |
| Correct method of feeding of expressed breast milk | 76 (80.0%) |

ILLUSTRATIONS

Chart No. 1 : Correct Information about Expression of Breast milk in study participants

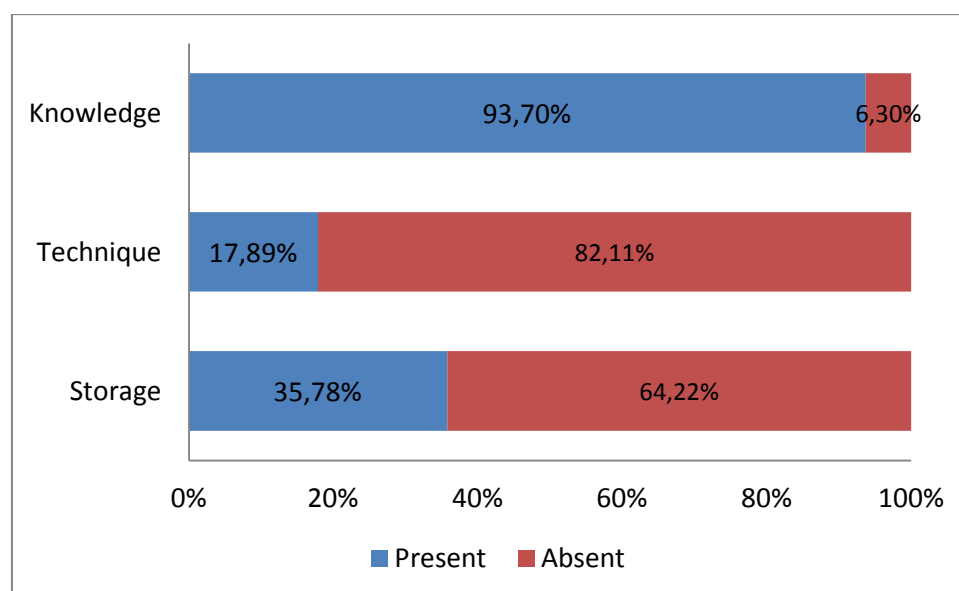


Chart No. 2: Attitude of study participants about Expression of breast milk

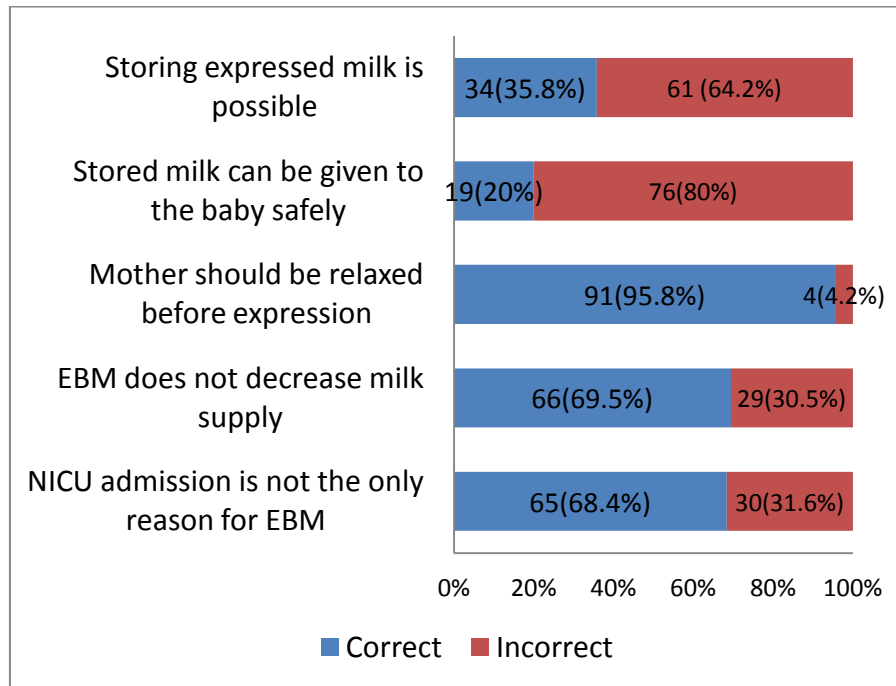
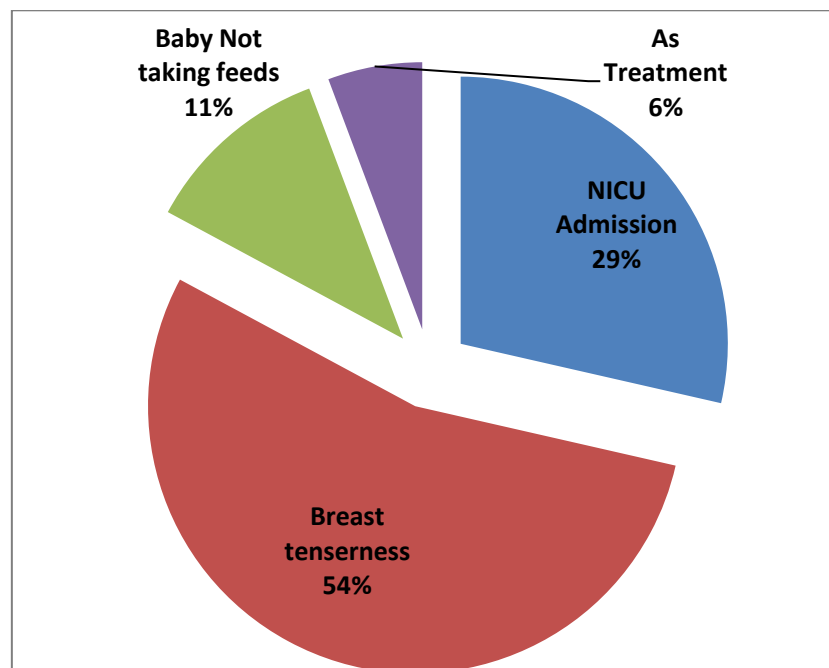


Chart No. 3: Reasons for Expression Of Breast Milk (n= 17)



Discussion and Conclusion

In US the trends of breastfeeding have changed and now majority women give expressed breast milk to the baby.⁽¹⁰⁾ But in present study, only 17 (17.9%) mothers had ever expressed breast milk and half of them did so for relieving breast tenderness (9 out of 17 (52.94%)).They discarded the milk instead of feeding it to baby. Those who fed the expressed milk to the baby did so only when the baby was admitted in NICU.

90% of the Mothers who expressed milk for their babies due to their NICU admission had no idea that milk could be expressed whenever she wants and can be stored and fed to the baby at later time. Hence the benefit of expression of breast milk to increase the milk supply of the mother was not properly utilized.

Expressed breast milk was fed to baby using Wati-spoonby all 17 study subjects. It is a good practice as it avoids nipple confusion which can occur if it's given by bottle.

Awareness about Exclusive breast feeding was found to be better (92.6%) than the study findings (51%) by Ekamberam M. et al⁽¹⁾.But the Knowledge about methods of breast milk expression and storage was found to be not satisfactory in present study. The study by Ekamberam M, et al⁽¹⁾found that knowledge of correct technique of expressing breast milk was present in 34% ; while in current study it was found to be quite low (17.8%). Correct knowledge about storing the expressed milk at room temperature was similar in both studies i.e. present approximately in 2% of study sample.

69.5% stated that Expression does not decrease the milk supply. This indicates good attitude towards expression of breast milk by the study participants.

Major Source of information was stated as relatives followed by friends. This could be the reason that, though the mothers in the study group were aware of expression of breast milk, the knowledge about the techniques to do so and practice of feeding the expressed milk to the baby was not optimum. Hence, health care workers

need to promote the expression of breast milk to prevent breast related complications during PNC period, to ensure proper nutrition of the babies in all conditions, for maintaining exclusive breastfeeding in all situations, for establishing breastfeeding and increasing mother's milk supply.

High level of awareness and presence of positive attitude towards expression of breast milk indicates that the women just need detail technical knowledge and psychological support to be able to express breastmilk effectively. Education of and promotion by the health care workers will be the key issue in this regards.

Awareness & knowledge about expression of breast milk, its methods and storage, among women as well as health care workers, should be increased by in depth advice during ANC period, demonstrations, videos and on-job trainings.HCW should emphasize the role of breast milk expression (which increases breast milk secretion and prevents certain complications) in successful breastfeeding.

Availability of breast milk banks should be the long term goal to avoid wastage of excess expressed breast milk.

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