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Research article

A STUDY OF BREASTFEEDING AND COMPLEMENTARY FEEDING PRACTICES WITH EMPHASIS ON MISCONCEPTIONS AMONGST THE WOMEN WITH UNDER TWO YEAR CHILDREN IN RURAL AREA

Rahalkar Ashwinee A¹, *Phalke Deepak B², Phalke Vaishali D³

¹Student, Final MBBS, Rural Medical College, Pravara Institute of Medical Sciences, Loni, Maharashtra, India

^{2,3}Professor, Department of Community Medicine, Pravara Institute of Medical Sciences, Loni, Maharashtra

*Corresponding author email: deephalke@yahoo.co.in

ABSTRACT

Context: Breastfeeding is one of the most important determinants of child survival, birth spacing, and the prevention of childhood infections. The beneficial effects of breastfeeding depend on its initiation, duration, and the age at which the breastfed child is weaned. The complementary feeding pattern also plays a very important role in the growth and development of the child. **Aims & objectives:** To study breastfeeding and complementary feeding practices adopted by women of Loni area. To study the socio-cultural factors influencing breastfeeding and complementary feeding practices. **Settings and Design:** Descriptive cross sectional study **Methods and Material:** 150 women fulfilling eligibility criteria were taken up for the study for duration of two months. A detailed questionnaire was given to the mothers and results were analysed later on. Statistical analysis used: Chi square test **Results:** In 4.6% cases prelacteal food was given. Colostrum was given in 90% cases, while in 10% it was not given. Only 50.6% babies were breastfed within 1 hour, Complementary feeding was started after 6 months in 84% babies, before 6 months in 4% and 12% did not know when to start weaning. Majority (58%) said no to breastfeeding when mother was ill while 56.5% women had no change in their diet after delivery. Mother's educational status was associated with proper breastfeeding practices while parity and socioeconomic factors had no significant impact. **Conclusions:** Most of the women adopted appropriate practices regarding breastfeeding and complementary feeding, but still misconceptions were noted. Thus more awareness should be created regarding this topic.

Keywords: Breast feeding, Complementary feeding, Sociocultural practices

INTRODUCTION

For almost all infants, breast milk remains the simplest, healthiest, and least expensive food, which fulfils their requirement¹. Breastfeeding is one of the most important determinants of child survival, birth spacing, and the prevention of childhood infections. Under any circumstances, breast milk is the ideal food for the infant. Proper implementation of recommendations regarding breastfeeding and complementary feeding will respectively prevent 13% and 6% (total=19%) deaths in under 5 age

group². A great asset in India is that on an average Indian mother, although poor in nutritional status, has a remarkable ability to breastfeed her infant for prolonged periods, sometimes extending up to nearly 2 years and beyond. Longitudinal and cross sectional studies indicate that poor Indian women secrete as much as 400-600 ml of milk per day during the first year³

It has been well documented that breastfeeding has many beneficial effects on the baby as well as the

mother. It has been observed that infants between 0-5 months who have not been breastfed have a seven-fold and five-fold increased risks of death due to diarrhoea and pneumonia, respectively, than infants who have been exclusively breastfed. Also, non-exclusive rather than exclusive breastfeeding results in more than twofold increased risk of dying due to pneumonia and diarrhoea with higher risk in 6-11 month old infants¹

The complementary feeding pattern also plays a very important role in the growth and development of the child. Complementary feeding means gradual withdrawal of the child from breast milk and giving supplementary food. There is very little data available on socio-cultural practices in rural areas, owing to location of medical colleges mostly in urban areas. Since present study is conducted in a tertiary care hospital of rural area, it brings an interesting perspective regarding problems of children's nutrition in rural community.

METHODS

It is a descriptive cross sectional study conducted among 150 lactating mothers who attended Paediatrics OPD and wards during the study period (May 2013 to June 2013) in a Tertiary care hospital attached to medical college in a rural area of western Maharashtra. The institutional ethical committee clearance was obtained before initiation of the study. Women having children in the age group of 0-2 years were enrolled for the study. While women suffering from infectious diseases like HIV and those suffering from contagious diseases in the area of the nipple were excluded.

Study design: - It is a descriptive cross sectional study conducted in Tertiary care hospital. Women fulfilling the eligibility criteria were enrolled. A detailed questionnaire was made in consultation with the research committee. The questionnaire was

translated into the local language (Marathi) and was used to assess knowledge and practices related to breastfeeding and complementary feeding after obtaining verbal consent of the participants. Women having children of any sex i.e. male or female were included in the study.

The questionnaire covered the following parameters- Mother's age, gravida, parity and educational status, occupation of both parents, per capita income per month, various practices related to breastfeeding like an initiation of breastfeeding, giving colostrum, giving pre-lacteal feed, period of exclusive breastfeeding etc. knowledge regarding the advantages of giving colostrum, continuing/discontinued breastfeeding when a child is suffering from diarrhoea, age of initiation of complementary feeding type of supplementary food given, changes in mother's diet after delivery. Pamphlets showing appropriate breastfeeding position as per the Infant and Young Child Feeding (IYCF) module was used to ask the mothers if they breastfed their children in the same manner. And later on, pamphlets were given to the mothers to educate them. Once the questionnaire was filled, doubts related to the same were clarified.

Study Duration- May 2013 to December 2013

STATISTICAL ANALYSIS

The data was collected. Statistical analysis using Chi square test was done to see the association between socio cultural-factors and breastfeeding and complementary feeding practices.

RESULTS

It was seen that 7/150 babies were given pre-lacteal feed. Sugar water, cow milk, goat milk, jiggery and honey were given as pre-lacteal feed.

Table 1: Education v/s knowledge and practices related to breastfeeding

Mother's educational status		Nil/ Primary education	Secondary education	Graduation	Chi square value	P values
Advantages of colostrums	Yes	4/19 (21.0%)	40/114 (54.4%)	11/17(64.7%)	7.88	*P<0.05
	No	15/19 (78.9%)	74/114 (45.6%)	6/17 (35.3%)		
Colostrum given or not	Yes	18/19 (94.7%)	110/114 (96.5%)	17/17 (100%)	0.082	P>0.05
	No	1/19 (5.3%)	4/114 (3.5%)	0		

* Statistically significant

It was seen that, mothers who were graduates or had secondary level education knew that colostrum

protects the baby against infections, as compared to those having a primary or nil education. Even then,

colostrum was given by majority of the women from all three groups. Thus, education was positively associated with awareness regarding advantages of colostrum while no association was seen between educational status and practice of giving colostrum.

Table 2: Initiation of breastfeeding

Initiation of breastfeeding	Number of women	%
Within 1 hour of birth	76/150	50.5
Within 2-5 hours of birth	38/150	25.3
1 day-1 month after birth	36/150	24.3

50% of mothers initiated breastfeeding within 1 hour after birth. It was observed that in some cases breastfeeding was initiated after a day up to 1 month after birth.

Table 3: Parity versus complementary feeding practices

Parameter	Primipara	Multipara
Complementary feeding before 6 months	1/32 (3.1%)	2/67 (2.9%)
Complementary feeding after 6 months	31/32 (96.9%)	65/67 (97.0%)
Chi square value	0.005	
P value	>0.05	

99/150 babies were given supplementary food; while in 51 exclusive breastfeeding was done.

No significant correlation was observed between parity and complementary feeding practices. In primi as well as multi para, complementary feeding was done after 6 months in majority of the cases.

Table 4: Changes in mother's diet after delivery

Diet	Number of women	%
No change	83	56.6
Additional diet	35	23.4
Less diet	29	19.4
Liquid diet	1	0.6

Majority of the women made no changes in their diet after delivery. A few, in fact, consumed less than normal diet.

It was observed that per capita income per month had no impact on the duration of exclusive breastfeeding. Most of the women in both groups had done exclusive breastfeeding up to 6 months of age.

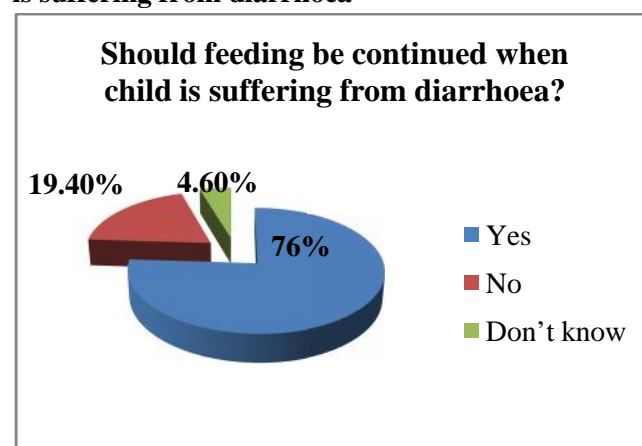
Majority of the women were aware that feeding should be continued even when the child is suffering

from diarrhoea. But still some said no to feed when the child was suffering from diarrhoea (fig: 1)

Table 5: Association between economic status and duration of exclusive breastfeeding

	>Rs 900 per person per month	<Rs 900 per person per month
Exclusive breastfeeding for more than 6 months	86	38
Exclusive breastfeeding for less than 6 months	6	1
Exclusive breastfeeding for less than 6 months	17	2
Chi square value	3.95	
P value	>0.05	

Fig 1- Should breast feeding be continued when child is suffering from diarrhoea



DISCUSSION

As per IYCF guidelines pre-lacteal feed should not be given to a baby. Even then, as per the traditional practice, pre-lacteal feed was given to little babies. Although in few women, this misconception of giving pre-lacteal feed was observed.

Ideally breastfeeding should be initiated within one hour after birth². However, as per table 2, in this study, it was found that only half of total number of women initiated breastfeeding within first hour of birth. While a quarter of them started it within 2-5 hours after birth i.e. total three quarter of mothers initiated breastfeeding on the first day after birth. Thus, the correct practice of initiation of breastfeeding immediately after birth was not adopted by all mothers showing another misconception in our area. In contrast to this, only a quarter of women started breastfeeding their babies on the first day of birth in rural areas of Punjab⁴. While, higher number of mothers initiated breastfeeding within first 2 hours

of birth in another study carried out in a rural area of Maharashtra⁵ However, as per National family health survey III (NFHS III) it was found that less than one fourth (23%) of women in India² and more than half (52%) women of Maharashtra initiated breastfeeding early². Thus, the results of our study were comparable to that of the regional figure of Maharashtra but not comparable to national figures. According to table I, majority of the mothers gave colostrum to their babies, but still one tenth discarded it. This is a misconception that colostrum should not be given, which was seen in some women. Even though colostrum was given by most of the mothers, awareness regarding its advantages was seen in very few. Exclusive breastfeeding for 6 months has a potential to reduce under 5 mortality rate by 13%. Although most of the babies were exclusively breastfed for more than 6 months, there were few who started complementary feeding before 6 months of age and some did not know till what age exclusive breastfeeding should be done. Studies have shown that sometimes exclusive breastfeeding is done much beyond 6 months, which is insufficient to fulfil the child's nutritional demand and thus should be discouraged⁷ and in our study also few such cases were found where exclusive breastfeeding was done much beyond 6 months. Hence, awareness regarding the age of exclusive breastfeeding was seen in most of the women, however not seen in all.

At the time of antenatal counseling, emphasis should be placed on importance about the advantages of breastfeeding thereby improves breastfeeding practices⁸. Even then, only one-fifth of the women were told about appropriate breastfeeding methods and its advantages during antenatal counseling. So, not all women were told about the method and advantages of breastfeeding, antenatal counseling should have been done ideally. Nutritional demand of women increases during pregnancy and further increases during lactation⁹. Thus, appropriate changes in the diet should be done after delivery. As seen in table 4, not even one fourth of the women had an additional diet after delivery there by proving that knowledge regarding changes in mother's diet after delivery was poor. As per WHO guidelines, it is recommended that breastfeeding should be continued even when the child is suffering from diarrhoea. But still, as per figure 1, almost more than one quarter of women said no to breastfeeding when the child was

suffering from diarrhoea, showing that misconception related to feeding practices when child was having diarrhoea was present. In primi as well as multi para, complementary feeding was done after 6 months in most of the cases. As observed in table 3, no association was seen between parity of the mother and age of introduction of complementary feeding. Also according to table 5, no association was observed between socioeconomic status and duration of exclusive breastfeeding as it was done up to 6 months in most of the women belonging to different socio-economic classes.

Thus, knowledge and practices regarding breastfeeding and complementary feeding were influenced by-mother's educational status. But no significant variations were seen due to factors like-parity of the mother and socioeconomic status.

CONCLUSION

Though majority of the women adopted appropriate breastfeeding and complementary feeding practices, there is still need of creating awareness regarding breastfeeding and complementary feeding practices as misconception of not giving colostrum, giving of pre-lacteal feed and late initiation of breastfeeding were existing. Also, some women did not know about the age at which supplementary food should be introduced. There were inadequate changes in mother's diet after delivery and feeding was not done when child was suffering from diarrhoea. Thus, there is need of educating the women regarding breastfeeding and complementary feeding practices.

LIMITATIONS

A larger sample size would yield better results for generalization. This is a hospital based study thus the results cannot be generalized. Recall bias of participants is also a limitation.

RECOMMENDATIONS

The antenatal counselling regarding importance of colostrums & breastfeeding practices should be given. Doctors, nurses, postgraduates and interns should help the mother for initiation of breastfeeding. Drawbacks of bottle feeding must be emphasized. Audio-visual aids like a television set showing proper breastfeeding and weaning practices should be provided in gynaecology and paediatrics OPD. Removing misconceptions & misbeliefs regarding

breastfeeding and complementary feeding during ANC and PNC is necessary.

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Conflict of Interest: Nil

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