

## ORIGINAL ARTICLE

## KNOWLEDGE, ATTITUDE AND PRACTICES OF MOTHERS REGARDING INFANT FEEDING PRACTICES

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## ABSTRACT

**Background:** Present study was conducted to assess the knowledge, attitude and practices of mothers towards infant feeding practices.

**Materials and methods:** The mothers of infants, coming to a tertiary care centre, Ahmedabad, on outpatient basis were interviewed using a pre-designed questionnaire. Total 150 mothers were interviewed.

**Results:** Out of the total, 18% mothers were illiterate. 58.67% mothers have been counselled by doctor about feeding. Regarding breast feeding, 96% knew about exclusive breast feeding up to 6 months. 90.67% think that colostrum is good for baby. 34.67% mothers have given pre-lacteal feeds, tea and jaggery was most common. 84.67% mothers knew that they should take extra food during lactation. Father (36%) most commonly help in feeding while 31.33% don't get any domestic help. 78.67% women consult doctor for feeding problems. Most common reason of stopping breast feeding was inadequate milk secretion (54.67%). 18% think that feeding should be stopped during illness. 75.33% women were completely satisfied with their feeding practices.

**Conclusion-** Mothers had good knowledge about infant feeding practices. In spite of good knowledge there are lacunae in the practices of mothers due to social and economic reasons. Level of education has positive impact on infant feeding practices. Counselling by doctors had a better impact on the attitude and practices of mothers.

**Keywords-** Infant feeding, breastfeeding, attitude and practice

## INTRODUCTION

Child is the chief victim of interplay of nutrition, socioeconomic and health factors that cause malnutrition. The rise of malnutrition in children during the first two years of life is indicative of poor infant feeding practices. Adequate nutrition is essential for children's health and development. Growth during the first year of life is greater than at any other time after birth. Breast milk provides immunologic protection against death from infectious diseases, such as diarrhoea, respiratory infections, otitis media, pneumonia and meningitis. Good nutrition during this period of rapid growth is vital to ensure that the infant develops both physically and mentally to the fullest potential. Poor feeding practices are a major threat to social and economic development. Nutritional counseling is required to improve the infant feeding practices. This study was conducted to assess mother's knowledge regarding infant feeding and to assess the attitude and practices towards the recommended feeding practices.

India is a kaleidoscope of various cultures and traditions. A lot of the customs and practices have their effect over health including infant feeding practices. By

assessing the knowledge, attitude and practices of 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.

## MATERIALS AND METHODS

This cross-sectional study was conducted on mothers of children less than one year of age attending the outpatient department of a tertiary care centre at Ahmedabad city. An orally expressed consent was taken by the participating mothers. A total of 150 mothers were interviewed who were randomly selected from the outpatient department over a period of 3 months. A structured questionnaire was prepared for the study based on the national guidelines for infant and young child feeding issued by the government of India<sup>1</sup>. These questionnaires were sent out, which were to be filled and returned. Illiterate mothers were asked to answer the questions orally and were filled in by volunteers. Attitude and practices of participants were included in the study.

**RESULTS**

Table 1 shows that the number of interviewed mothers of children aged less than 6 months and more than 6 months attending the outpatient department were equal. Mothers of male children were more with 34% among infants less than 6 months and 32% among infants more than 6 months.

**Table 1: Age and sex of infants whose mothers were interviewed**

Age	<6 months (%)	> 6 months (%)
Males	51 (34)	48 (32)
Females	24 (16)	27 (18)

**Table 2: Educational status of mother**

Education	Number (%)	Knowledge (%)
Illiterate	27(18.00)	14(51.85)
Literate/Primary school	39(26.00)	24(61.54)
Middle school	36(24.00)	24(66.67)
High school	31(20.67)	22(70.97)
Intermediate	8(5.33)	6(75.00)
Graduate or Postgraduate	9(6.00)	8(88.89)
Professional or honours	-	

Table 2 shows that highest percentages of mothers, 26% were literate with primary education followed by 24% of mothers who were educated upto middle school. 18% mothers were illiterate. 88.89% graduate mothers had good knowledge with a score >80%.

**Table 3: Infant feeding attributes**

Attribute	Number(%)
<b>Time of initiating breast feeding</b>	
<b>Knowledge</b>	
Within 1 hr of birth	106(70.67)
Between 1-4 hrs of birth	33(22.00)
Between 1-3 days of birth	3(2.00)
Within 1 <sup>st</sup> week of birth	8(5.33)
<b>Practice</b>	
Within 1 hr of birth	82(54.67)
Between 1-4 hrs of birth	35(23.33)
Between 1-3 days of birth	21(14.00)
Within 1 <sup>st</sup> week of birth	12(8.00)
<b>Opinion about colostrums</b>	
Good	136(90.67)
Bad	14(9.33)
<b>Exclusive breast feeding for 6 months</b>	
<b>Knowledge</b>	
Exclusive breast feeding	144(96.00)
Mixed feeding	6(4.00)
<b>Practice</b>	
Exclusive breast feeding	103(68.67)
Mixed feeding	47(31.33)

**Prelacteal feeds**

Given	52(34.67)
Not given	98(65.33)

**Top milk used during mixed feeding(n=47)**

Packaged milk	14(29.79)
Goat's milk	12(25.53)
Cow's milk	11(23.41)
Formula milk	3(6.38)
Buffalo's milk	7(14.89)

**Duration of breast feeding**

6 months	43(28.67)
12 months	88(58.67)
18 months	13(8.66)
24 months	6(4.00)

**Initiation of complementary feeding**

6 months	112(74.67)
1 year	28(18.66)
2 year	3(2.00)
Others	7(4.67)

**Attributes of complementary foods score**

<60%	55(36.67)
60-80%	51(34.00)
>80%	44(29.33)

**Counsellor**

Doctor	88(58.67)
Relatives	22(14.67)
Local health worker	15(10.00)
Not counselled	25(16.67)

**Aid/Support in feeding**

Father	54(36.00)
Grandmother	46(30.67)
Others	3(2.00)
No help	47(31.33)

**Continuation of breast feeding beyond 6 months**

Continued	91(60.67)
Discontinued	59(39.33)

**Reasons for discontinuing breast feeding**

Inadequate milk secretion	82(54.67)
Not sucking well on breast	24(16.00)
Baby not gaining weight	13(8.67)
Mother got pregnant	12(8.00)
Breast abscess/sore nipples	9(6.00)
Baby became sick	8(5.33)
Mother became sick	2(1.33)

**Feeding during illness**

Continued	123(82.00)
Discontinued	27(18.00)

**Consultation during illness**

Doctor	118(78.67)
Relatives	26(17.33)
Friends	5(3.33)
None	1(0.67)

Table 3 shows that 70.67% of mothers had the knowledge about initiation of breast feeding within 1 hour of birth whereas 54.67% practiced it. 90.67% of mothers had a good opinion about colostrum. 96% mothers had the knowledge of exclusive breast feeding but only 68.67% practiced it. 34.67% of infants had received prelacteal feeds. The most common substance given was tea and jaggery. The most common top milk

practiced was packaged milk (29.79%) followed by goat's milk and cow's milk (25.53%). majority of mothers (58.67%) practiced breast feeding upto 12 months of age while only 4% breast fed upto 24 months.74.67% of mothers initiated complementary feeding by 6 months of age. Only 29.33% had a good score (>80%) regarding the attributes of complementary feeding. The score was given based on a scoring system which was prepared based on national guidelines on infant and young child feeding<sup>1</sup>. Doctor (58.67%) was the most frequent counsellor regarding feeding followed by relatives(14.67%).Fathers (36%) most commonly support the mother in feeding.60.67% mothers continued breast feeding beyond 6 months. Of the 39.33% mothers who discontinued breast feeding the most common cause was inadequate milk secretion(54.67%) followed by sucking difficulties by the baby(16%).82% continued feeding during illness. 78.67% of mothers consulted the doctor during illness.

**Table 4: Maternal nutrition**

	Yes (%)	No (%)
Taken extra calories during pregnancy and lactation	127(84.67)	23(15.33)
Taken supplements during pregnancy and lactation	107(71.33)	43(28.67)

Table 4 shows that 84.67% mothers had taken extra calories and 71.33% had taken supplements during pregnancy and lactation.

**Table 5: Self assessment of mothers**

Response	Number (%)
Completely satisfied	113(75.33)
Partly satisfied	31(20.67)
Initially satisfied but not now	3(2.00)
Initially had problems but now satisfied	1(0.67)
Not satisfied	2(1.33)

Table 5 shows that 75.33% of mothers were completely satisfied with their infant feeding practice and only 1.33% being not satisfied.

## DISCUSSION

In the present study, highest percentages of mothers were literate with primary education (26%) and knowledge among the graduates (88.89%) was highest. Knowledge among the illiterate mothers was 51.85% indicating that though illiteracy can be a barrier, appropriate health education can have a positive impact on the feeding practices.70.67% of mothers had the knowledge about initiation of breast feeding within 1 hour of birth whereas 54.67% practiced it.90.67% of mothers had good opinion about colostrum. 96% mothers had the knowledge of exclusive breast feeding while only 68.67% practiced it. Though there is good knowledge about initiation of breast feeding and exclusive breast feeding, its implication in terms of

practicing it are not satisfactory. Prolactal feeds were given to 34.67% of infants. The most common prolactal feeds was tea and jaggery. Prolactal feed is a popular custom in the society of giving honey, sugar water and water to the newborn<sup>2</sup>. This custom increases the chances of infection to the infant. Packaged milk (29.79%) was the most commonly used top milk followed by goat's milk(25.53%) and cow's milk (23.41%).58.67% mothers practiced breast feeding upto 12 months of age while only 4% breast fed upto 24 months.74.67% mothers initiated complementary feeding by 6 months but only 29.33% had the right attributes. Hence it is essential to educate the mother regarding exclusive breast feeding, timely and appropriate initiation of complementary feeding for adequate growth of the infant. The most frequent counsellor regarding feeding was doctor(58.67%) followed by relatives(14.67%). An important result of this study was that the fathers (36%) most commonly supported the mother in feeding in contrary to the popular belief that the mother or the mother in law supports the mother of the infant more frequently. 60.67% mothers continued breast feeding beyond 6 months. Most common cause of discontinuation being inadequate milk secretion (54.67%) followed by sucking difficulties by the baby. This can be easily tackled by proper counselling of the mother.82% continued feeding during illness and 78.67% consulted the doctor. 84.67% mothers had taken extra calories and 71.33% had taken supplements during pregnancy and lactation. 75.33% of mothers were completely satisfied with their infant feeding practice and only 1.33% being not satisfied.

Infant mortality rate in India is 47 per thousand live births<sup>3</sup>. Nutrition interventions have been acknowledged as being among the most effective preventive actions for reducing mortality among children under the age of five years. Of these actions, exclusive breastfeeding ranks first; being estimated as having the potential to prevent 13% of all deaths in this age group while complementary feeding, water sanitation and hygiene would reduce 6% and 3% respectively<sup>4,5</sup>.

Recent scientific evidence reveals that malnutrition has been responsible, directly or indirectly, for 60% of all deaths among children under five years annually. Over 2/3 of these deaths are often associated with inappropriate feeding practices and occur during the first year of life. Only 35% of infants world-wide are exclusively breastfed during the first four months of life and complementary feeding begins either too early or too late with foods which are often nutritionally inadequate and unsafe. Poor feeding practices in infancy and early childhood, resulting in malnutrition, contribute to impaired cognitive and social development, poor school performance and reduced productivity in later life. Poor feeding practices are, therefore, a major threat to social and economic development as they are among the most serious obstacles to attaining and maintaining health of this important age group<sup>5</sup>.

## CONCLUSION

In the present study, mothers had good knowledge about infant feeding practices. In spite of good knowledge there are lacunae in the practices of mothers due to social and economic reasons. Level of education has positive impact on infant feeding practices. Counselling by doctors had a better impact on the attitude and practices of mothers. Knowledge, attitudes and practices associated with infant and young child feeding forms an essential first step for any 'need-felt' for an intervention programme designed to bring about positive behavioral change in infant health<sup>6</sup>. The interaction during the study with the mothers was utilized as an opportunity to educate them regarding the importance and the recommended infant feeding practices.

Breast-feeding has declined worldwide in recent years, as a result of urbanization, marketing of infant milk formulae and maternal employment outside the home<sup>7</sup>. Studies in India have also shown a decline in breast-feeding trends, especially in urban areas<sup>8,9</sup>. It is important to provide appropriate health education and utilise every opportunity of contact with the mother to counsel them regarding the appropriate feeding practices.

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