



Study on breast-feeding practices among urban and rural women in Kakinada

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Abstract:

The importance of breastfeeding in infant nutrition, health and survival has long been recognized. It is now well Established that over millennia, breast feeding has been major determinant of infant growth, health and survival, and the contraceptive effect of lactation has been the principal regulator of human fertility. Objective: To study the breast-feeding practices among urban and rural women in and around Kakinada. The present study was done in pediatric outpatient department on the mothers with children of < 1-year age, The subjects were randomly selected who are attending the pediatrics outpatient department. The study was carried over a period of one year, (i.e., November 2004 to October 2005). The number of mothers interviewed was 440 (n=440).

Key words: Breastfeeding, Kakinada, Pre lacteal feed, Rural, Urban

Introduction:

Studies carried out in fifties and sixties have shown that both in urban and rural areas in India breast-feeding, no marked differences were noted between the states or between the different income groups [1].

According to the report regarding the "Status of infant and young child feeding in 49 districts in India" by BPNI (Breast feeding promotion network of India) [2] the following are the observations noted.

1. Inflation of Breast-feeding

Twenty eight percent of mothers initiated breast-feeding within one hour. Another 30%, Initiated

within next 4 hours and 42% started after 4 hours or more.

2. Pre-lacteal feeding

Around 49% of mothers gave pre-lacteal feeds to baby.

3. Exclusive breast-feeding

The average of exclusively breast fed children during the first 6 months & 55.2% for <4 months and 27.3% for 4-6 months.

4. Bottle feeding

The rate of bottle-feeding is only 23% during 0-6 months.

5. Continued Breast-feeding period

1/3 rd of mothers planned to continue breast-feeding for a period #18 months, about half of them intended to continue breast-feeding for 18-24 months and only 1/5th of them wanted to continue to breast-feeding beyond 24 months.

6. Complimentary feeding practices

Seventy eight percent of mothers were giving solid/semisolid food to children aged 6-9 months and most mothers (98.6%) continued breast-feeding.

In Tamilnadu the studies conducted at Chengalpat and Chidambaram districts revealed the initiation of breast feeding at right time (71% & 53.3%) giving of pre lacteal feeds (20.8% & 33.9%), exclusive breast feeding for 6 months (19.8% & 29%) and starting of complimentary food after 6 months (74% & 88.3%) respectively [2].

Objective: To Study the breast-feeding practices among urban and rural women in and around Kakinada.

Materials and Methods

The present study was done in pediatric outpatient department on the mothers with children of < 1-year age. The subjects were randomly selected who are attending the pediatrics outpatient department. The study was carried over a period of one year, (i.e., November 2004 to October 2005). The number of mothers interviewed was 440 (n=440). A detailed pretested proforma after a pilot study was used for obtaining information from the mothers after obtaining their consent. In the proforma different questions are included keeping in view of the objectives.

The information obtained through the detailed pretested proforma has been subjected to various statistical procedures and analyzed accordingly and presented in tables/ graphs. Mothers were explained the meaning of each question in regional language.

Study Type : Cross sectional study

Data Collection : Prestructured questionnaire

Study Place : Pediatric out patient department, Rangaraya Medical College, Kakinada, East Godavari District.

Sample size : 440 mothers

Study period : November 2004 to October 2005

Study population: Mothers with children of < 1 year Age group

Sampling technique : Simple random technique

Data analysis: Data was analyzed with Epi Info Software: the analysis was done using 'P value' to draw the inferences'.

Results:

In the Present study, total number of mothers studied was 440. Out of them 200 mothers are from rural area and other 240 mothers from urban area.

In present study out of 440 mothers, 388 gave colostrums. Whereas 52 mothers (11.81%) discarded colostrums.

The present study is not coinciding with study of Srivastava et al³⁵ where 82.9% of mothers discarded colostrums.

The probable discordance with above study may be possibly due to high number of literates and urban people included in the present study. In rural areas 20% mothers discarded colostrums, where as 5% of urban mothers discarded.

Table 1: Practice of giving colostrums in relation to rural and urban areas

Variable	Given Colostrum		Discarded Colostrum		Total
	No. of cases	%	No. of Cases	%	
Rural	160	80	40	20	200
Urban	228	95	12	5	240

Chi-square = 22.135 with 1 degree of freedom;
P<0.001

Table 2: Practice of giving prelacteal feeds in relation to rural and urban areas

Variable	Given prelacteal feeds		Not-given prelacteal feeds		Total
	No. of cases	%	No. of Cases	%	
Rural	64	32	136	68	200
Urban	76	31.7	164	68.3	240

P value = 0.9

In rural and urban population, there is no much difference in the practice of giving prelacteal feeds. 32% of rural population and 31.66% of urban population had given prelacteal feeds. P value is not significant.

Table 3: Initiation of breast-feeding in relation to rural and urban areas

Variable	Breast feeding before 12hrs		Breast feeding after 12hrs		Total
	No. of cases	%	No. of Cas	%	
Rural	140	70	60	30	200
Urban	188	78.3	52	21.7	240

Chi-square = 3.565 with 1 degree of freedom; P = 0.059

70% rural and 78.33% of urban mothers started before 12 hours. Whereas 30% rural and 21.66% urban mother gave breastfeeding after 12 hours.

Table 4: Practice of exclusive breastfeeding (EBF) in relation to rural and urban areas

Variable	EBF for 6 months		Not given EBF		Total
	No. of cases	Percentage	No. of Cases	Percentage	
Rural	129	64.5	61	35.2	200
Urban	85	35.4	155	64.6	240

In rural area exclusive breast feed for 6 months period was given by 64.5% of mothers whereas in urban area exclusive breastfeeding was given by 35.4% for 6 months.

Table 5: Duration of breastfeeding in relation to rural and urban areas

Variable	Breastfeeding beyond 1yr		Discontinued before 1yr		Total
	No. of cases	Percentage	No. of Cases	Percentage	
Rural	122	61	78	39	200
Urban	108	45	32	55	240

P value = < 0.005

In rural area 61% of mothers continued. Breastfeeding beyond 1 year whereas in urban area. 45% only continued breastfeeding beyond 1 year.

Table 6: Type of milk used in relation to rural and urban areas

Variable	Powdered milk formulae		Animal milk		Total
	No. of cases	Percentage	No. of Cases	Percentage	
Rural	5	6.6	71	93.4	76
Urban	35	25.7	101	74.3	136

P value = < 0.005

In rural areas, 93.42% mothers used animal milk for artificial feeding whereas 6.58% used powdered milk formulae. In urban areas, 74.26% mothers used animal milk 25.73% used powdered formulae.

Table 7: Type of food used for complementary feeding in relation to rural in urban areas

Variable	Home made foods		Commercial		Total
	No.	Percentage	No.	Percentage	
Rural	127	63.5%	73	36.5%	200
Urban	113	47.08%	127	53.12%	240

In rural area 63.5%, mothers used rice as weaning foods and 36.5% mothers used commercial formulae. In urban mothers, 47.08% used rice as weaning food and 53.12% used commercial formulae.

Discussion:

Breastfeeding is the best way to feed infants and therefore, every effort should be made to promote and protect this salutary traditional practice everywhere [3]. Human milk has huge economic value, Market value: difficult to put cost. For a child of 3 months old, the cost of artificial feeding for a day costs about Rs 450/day, perpetuates income, poverty by additional spending on milk and sickness. The current level production of breast milk in India is 4000 million litres. Achievement of national goal of 6500 million litres will have an economic worth of \$ 326 million [4]. In the present study 92.7% mothers had, antenatal checkups during pregnancy and only 7.27% mothers did not have antenatal checkups. A good coverage of antenatal checkups is a good platform for breastfeeding advises. In the present study significantly higher number of urban and literate mothers had undergone antenatal checkups and compared to rural and illiterate mothers [6-10].

Most of the deliveries in the present study was hospital deliveries (70.9%) and remaining are home deliveries (29.09%). The place of delivery will be having positive impact on initiation of breastfeeding, colostrums feeding and not giving prelacteal feeds. The present study urban and literate mothers are having significantly high number of hospital deliveries compared to rural and illiterate mothers [11].

In the present study 88.2% of mothers gave colostrums and 11.8% mothers discarded colostrums. The practice of discarding colostrums is higher among rural, illiterate and home delivered mothers when compared to urban, literate and hospital delivered mothers. There is positive impact of maternal literacy and hospital delivery in the practice of giving colostrums.

In the present study 31.8% mothers had given prelacteal feeds. There is no significant difference in the practice of giving prelacteal feeds between rural and urban people. Unlike to the present study Aneja et al, reports that 87% of the children were being given commercially available weaning foods [5]. Illiterate and home delivered mothers are giving prelacteal feeds significantly higher when compared to literate and hospital delivered mothers.

74% mothers starting breastfeeding with in 12 hours of delivery and 26% mothers delayed

feeding beyond 12 hours. There is positive impact of literacy and hospital delivery when compared to illiterate and home delivered mothers, in initiating breast-feeding. 10th five year plan goal of timely initiation of breast-feeding is 50% which is surpassed in present study.

57.72% of total mothers gave exclusive breast-feeding up to 6 months. The practice of giving exclusive breast-feeding is higher among rural and illiterate mothers when compared to urban and literate mothers. Tenth five-year plan goal of increasing exclusive breast-feeding to 80% is very high when compared to present study.

52.27% mothers continued breast-feeding beyond one year whereas 47.73% mothers discontinued breast-feeding before one year. Significantly higher number of rural and illiterate; mothers continued breast-feeding beyond one year when compared to urban and literate mothers.

81.34% of mothers used animal milk for supplementary feeding. The use of animal milk for supplementary feeding is high both in rural and urban areas when compared to powdered formula. But significantly high number of urban mothers used powdered formulae compared to rural mothers. There is no significant difference in literate and illiterate mothers in using powdered milk formulae.

Most of urban and rural mothers received breastfeeding advise from grandparents. Significantly high number of urban mothers took breastfeeding advise from doctor when compared to rural mothers. There is significant difference between literate and illiterate mothers as more number of literate mothers compared to illiterate mothers took breastfeeding advise from doctor.

Most of mothers (80.9%) started complimentary feeding around 6 months. In urban and literate mothers time of starting of complementary feeding is earlier than compared to rural and illiterate mothers. Significantly, high number of rural and illiterate mothers used home made foods for complementary feeding compared to urban and literate mothers.

Changing trends

The changing trends in infant feeding are towards positive side in of colostrums feeding, early initiation of feeding not giving prelacteal feeds and timely introduction of complementary feeds. The changing trends are towards negative side aspects of exclusive breast feeding and duration of breastfeeding which needs to be urgently attended to. Study involving larger number of mothers from different areas in E.G. District may throw more light

on the existing trends in infant feeding practices there are prevalent in this areas.

Recommendations

1. Information, education and communication activities are important to encourage feeding of colostrums to new born and help discouraging prelacteal feeds.
2. Enhanced literacy of women helps improve feeding practices in infants.
3. Lactation management training for health care providers is mandatory to bring about desirable change in attitude of the nursing personnel.
4. All the hospitals should aim to become baby friendly.
5. Promotion of institutional deliveries will have a positive impact on early breastfeeding behavior.
6. Starting lactation management clinics with practical demonstration by multi disciplinary approach viz. obstetricians, pediatricians and nursing personnel (primary healthcare givers of new born) will go a long way in establishing healthy feeding practices including complementary feeding.

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