

## Infant Feeding Practices Among Patients of Pediatricians and General Practitioners

A. Gupta, J. Sobti and J.E. Rohde\*

*Indian Medical Association Headquarters, I.P. Estate and  
\*UNICEF House, UNICEF, Lodi Road, New Delhi*

In an attempt to document the infant feeding practices among patients of pediatricians and general practitioners, a study was carried over a period of one month and data of 10,374 infants were recorded using a pre-printed proforma marked by a simple 'tick' for each patient. The results showed: (i) initiation of breastfeeding was delayed in nearly half of the cases beyond 24 hours; (ii) introduction of bottle feeding in more than half of infants by the age of 4 months and (iii) introduction of solid foods later than eight months in almost half of infants. While breastfeeding is practised by 78% of women, only one in five practice exclusive breastfeeding till 4-6 months, and very few avoid bottle feeds. Much education and change in behaviour is needed if optimal benefit of breastfeeding in India is to be realised.

**Key Words:** *Infant feeding practices; Exclusive breastfeeding*

India is a vast country of nearly 844 million population and with a very high population growth rate of 2.1% as per 1991 census. Infant mortality rate is about 90 per thousand, with deaths due to diarrhoea one of the leading causes. Some efforts have been made to make better weaning foods to prevent or reduce malnutrition, but little effort has been made to promote and protect breastfeeding which is a primary prevention for all types of infant morbidity, and has a key role to play in reducing diarrhoea related mortality. We have seen a decline of breastfeeding with increasing urbanization

and industrialization. 'Bottle feeding culture' has become widely prevalent in urban areas and is invading the rural population also. Walia et al showed that prevalence of breastfeeding mothers at six months of age fell from 89% to 69% in a comparative study over a decade, and use of milk supplements within first month of life increased from nil to 25% in the illiterate group, and from 7% to 58% in the educated group of mothers.<sup>1</sup> Gopalan reported a sharp decline of exclusive breastfeeding from birth to six months.<sup>2</sup> A survey from Punjab showed that only 17% infants below six months were exclusively breast-fed.<sup>3</sup>

Causes of the decline are many, including: lack of skilled support by professionals, early introduction of bottle feeding, poor

Reprint requests : Dr. Arun Gupta, Consultant Pediatrician, Children's Medical Centre, BP-33, Pitampura, Delhi-110 034.

knowledge of feeding practices among health workers and general public and poor self confidence among mothers. To plan a programme to promote exclusive breastfeeding during the first 4-6 months of life, the Indian Medical Association, planned the present study to clearly document the present status of infant feeding practices amongst the clientele of member doctors.

### MATERIAL AND METHODS

One hundred and fifty doctors (pediatricians and general practitioners) from different parts of the country were requested to take part in the study. A pre-printed proforma with guidelines to mark the current feeding practice of infants seen on a given day, and recording of time of initiation of breastfeeding after birth by recall by the mother was sent to the selected doctors along with a self addressed stamped envelope for returning the proforma. One hundred doctors (80% pediatricians and 20% general practitioners) responded. Over a period of one month, feeding practices of 10,374 infants were recorded and initiation of breastfeeding was recorded in 10,032 infants. Results were tabulated and were analyzed state wise as well as between pediatricians versus general practitioners. (Table 1 shows the various categories recorded).

### RESULTS

Prevalence of exclusive breastfeeding was only 42% during the first month falling to about 20% by 4 months and 10% by 6 months.

About 85% of infants received breastmilk during the first 4 months, and about 70% were still getting some breastmilk by

TABLE 1. Categories of Feeding Practice and Initiation of Breastfeeding

#### I. Feeding practices recorded

- Exclusive breastfeeding
- Breastfeeding + artificial milk with bottle
- Breastfeeding + artificial milk with cup or spoon.
- Breastfeeding + water and/or other non milk fluids.
- Bottle feeding only
- Breastfeeding + solid food
- Bottle feeding + solid food
- Breastfeeding + bottle feeding + solid food.

#### II. Initiation of breastfeeding

- 0-6 hours after birth
- 6-12 hours after birth
- 12-24 hours after birth
- Over 24 hours of birth
- Never initiated.

12 months of age. One third of infants started receiving bottle feeds during first month. This number rose to about 1/2 by 2 months and by 6-8 months of age 2/3rd of infants were on bottle feeds. Feeding with cup and or spoon was distinctly unusual, being reported in about 4-8% of infants. (Table 2) Solids were relatively unusual during the first 4 months given to about 10% of infants. By 12 months about 76% were getting some solid food.

Over 40% started breastfeeding 24 hours or later after birth, 26% started within six hours, 16.5% within 6-12 hours and about 12% within 12-24 hours. Interestingly patients of general practitioners started breastfeeding earlier than those attending pediatricians (Table 3).

### DISCUSSION

This survey of infant feeding practices

TABLE 2. Feeding Practices of Infants by Age

Age group (months)	Exclusive breastfeeding No. (%)	Prevalence of breastfeeding No. (%)	Prevalence of bottle feeding No. (%)	Introduction of solids No. (%)
0-1	508 (42.4)	1035 (86.3)	396 (33)	47 (3.9)
1-2	360 (30.6)	999 (84.9)	564 (47.9)	87 (7.4)
2-4	333 (20.9)	1304 (81.7)	911 (57.1)	206 (16.6)
4-6	173 (9.8)	1329 (75)	1112 (62.7)	691 (39)
6-8	86 (5.1)	1247 (74)	1096 (65.1)	919 (54.5)
8-10	69 (4.7)	1081 (74.7)	977 (67.5)	919 (63.5)
10-12	48 (3.2)	1076 (71.5)	995 (66.2)	1151 (76.5)

TABLE 3. Comparison of Initiation of Breastfeeding Among two Groups

Time of initiation	Mothers attending clinic of:		Total No. (%)
	Pediatrician No. (%)	General physician No. (%)	
0-6 hours	2205 (25.2)	455 (35.5)	2660 (26.5)
6-12 hours	1312 (15)	341 (26.5)	1653 (16.5)
12-24 hours	1011 (11.5)	179 (14)	1190 (11.9)
Over 24 hours	3999 (45.7)	268 (20.9)	4267 (42.5)
Never	221 (2.5)	41 (3.2)	262 (2.6)

amongst patients of pediatricians and general practitioners has demonstrated that although breastfeeding is nearly universal in this population, with about 85% infants receiving some breastmilk, exclusive breastfeeding is practiced by only 42% in the first month of life falling to 30% by 2nd month, 20% by 4th month and 10% by 6 months. Breastfeeding is continued by 70% mothers upto 12 months of life. Thus while exclusive breastfeeding may be the exception, breastfeeds are given to the vast majority of infants. Introduction of bottlefeeds

occurs early with about half of infants receiving it by 2 months and 2/3rd of all infants get bottle feeds during infancy. Walia et al have reported a progressive increase in use of supplemental milk in first month of life over a decade.<sup>1</sup> Gopalan reported in 1984 that percentage of exclusively breastfed children sharply declined within the first four months.<sup>2</sup> The present study also demonstrates a very low incidence of exclusive breastfeeding during first 4-6 months of life. While reason for early introduction of bottlefeeding is unclear, the ini-

tiation of breastfeeds in at least half of cases is delayed beyond 24 hours and it may well account for the apparent insufficiency of breastmilk as perceived by the mother. Unfortunately, it was not possible to tell from this study whether those 'early feeding' mothers had a greater tendency to exclusively breastfeed at 4-6 months, than those initiating lactation later. Overall late initiation of lactation is a problem requiring intervention. Studies have shown that early contact definitely increases chances of longer breastfeeding<sup>4</sup> and early initiation can increase the prevalence of exclusive breastfeeding.<sup>5</sup>

This survey also shows about 10% receive solids in the first 4 months, rising rapidly to 60% by 6 months but reaches only 75% in the 10-12 month age group.

This study conducted by pediatricians and general practitioners from different parts of India (16 states) among their clientele, using a simple proforma requiring only a tick mark in appropriate column for feeding and age group, enabled us to gather useful information on infant feeding practices across the country. It is likely that these practices are widespread and typical as this clientele is typical of urban population of the country, and good number of rural people also come to towns and cities for medical attention.

This rapid survey of over 10,000 infants gives clear indication of late initiation of breastfeeding, lack of exclusive breastfeeding through early months of life, early introduction of bottle feeding and to a lesser extent introduction of other non milk fluids to a substantial proportion of infants. Part of these non-milk fluids are given by bottle, adding another disadvantage to infants.

Introduction of solid foods is found among only 50% infants by 6-8 months. By

10-12 months 25% are still not getting any solid foods; this shows a need for more information on introduction of appropriate weaning foods in infancy. The need is clear for extensive education of professionals and public for initiation of breastfeeding immediately after birth, avoiding bottle feeds at any age, practice exclusive breastfeeding throughout the first 4-6 months of life and appropriate solid foods in the later half of infancy.

This study will be repeated at 1-2 yearly intervals to measure the effect of interventions and health education efforts among professionals and the public.

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