INFANT FEEDING PRACTICES IN THE RURAL AND URBAN AREAS IN DISTRICT ABBOTTABAD

Farida Aziz, Jahangir A. Khan and Roshan Ara

SUMMARY

This article summarises the findings of a field study of infant feeding patterns in Urban and Rural areas of District Abbottabad. The main purpose of this study was to find out the reasons of declining trend of breast feeding. Over 70% rural mothers had no education and about 93% did not go to school. Average duration of breast feeding was observed to be 5.8 months and 19.2 months in the urban and rural areas respectively. The degree of suckling in urban and rural women was 9.7% and 24.7% respectively. It was observed that in urban areas 96% infants received breast milk for first 4 months of their life and by 2 years this level was dropped to 31%. In rural areas mothers breast feed their babies for 2 years on the average. 57% rural mothers believed that breast feeding is natural thing to do. The most obvious reason for stopping breast feeding was the next pregnancy. Urban mothers preferred brand name cereals as compared to homemade, which are most commonly used by rural mothers.

INTRODUCTION

The world-wide shifting in infant feeding has been cause of concern for some time. An increase in early weaning and reliance on bottle feeding have been reported from many countries. These changes are part of the pervasive social transformation taking place in the developing countries, involving the rapid urbanization, breakdown of traditional culture, more intensive communication between the countries and social groups, the demographic transition etc. The most important factor upon which the health, growth and development of a child depends is his nutrition. Breast feeding by mother not only is important source of calories and essential nutrients but it also provides the infants with immunity against many types of infections and promotes bonding between mother and infant.

Study by Shamim¹ showed that most of the urban women start early weaning of their children. It is a well-established fact that the early weaning affects the health and wellbeing of the infant. The cessation of breast feeding makes the infant more vulnerable to a wide range of health risks. In traditional cultures, breast feeding by mother is vital for the survival of the infant, but infant mortality is often high.² With the change in the traditional forming with new demands the health and the well-being of infants are being suffered.³ In rural areas of Pakistan the infant mortality, at present, is 100-120 per 1000 live births. Recently, the trend of breast feeding has increased in the Western women of high social class and even in the highly educated women.

This study was conducted to review current practices of infant feeding and to examine the factors that influence the choices made by mothers.

From: Ayub Medical College and PMRC, Abbottabad. **FARIDA AZIZ**, MBBS, MRCP(UK) Assistant Prof. Dept. of Paediatrics. **JAHANGIR ARSHAD KHAN**, Ph.D. (U.K) Principal Research Officer, dept.: PMRC. **ROSHAN ARA**, M.A. Laboratory Assistant, PMRC.

MATERIALS AND METHODS

In 1984 a survey was undertaken in the rural and urban area of district Abbottabad to investigate infant feeding practices. The data were collected through a questionnaire and the information was obtained only from the person who fed the child. Only mothers aged 16 years and older were included in the study. The sample consisted of 415 children from rural areas and 215 from urban areas of district Abbottabad. The rural areas were villages with no nearby hospital or industry whose main occupation was agriculture. The questions in the questionnaire were grouped into five.

- 1. The present milk feeding of the child, attitude of mothers towards breast feeding, duration and frequencies of breast feeding, the age when other milks were introduced, types of milk used and frequency of such milk feeds. Reasons for starting other milks and their preparation.
- 2. At what age the children started receiving solid types of food, the method of preparation and frequency of use.
- 3. Questionnaire included birth history, number of other children (alive/dead) also whether mother had received any guidance on feeding.
- 4. Mother's attitude towards breast feeding and the use of other milks and food.
- 5. Household information, impact of religion on breast feeding, also father's opinion towards breast feeding.

RESULTS AND DISCUSSION SOCIO- EMOGRAPHIC PROFILE

In rural areas over 70% mothers had no education as compared to only 15.6 per cent urban mothers (Table-1). Similarly, only 2 per cent rural mothers had education upto F.A. level and none had education above this level. Over 90% rural mothers did not go to work as compared to 75% of their counterparts in urban areas.

		Urban	R	Rural
Age of mother (years)	N =	215	N =	415
	No	%	No	%
16-19			12	13
20-24	29	13	42	10
25-29	112	52	207	50
30 and above	74	34	154	37
Education of Mother				
None		15.6		73.4
Primary/Matric		54.6		24.4
F.A		20.0		21.1
B.A and above		8.7		-
Working status of Mother				
Yes		24.6		7.2
No		75.2		92.7

Table 1:	Socio-Demograp	hic Profile	of the Sample
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HOUSEHOLD FACILITIES

Household facilities play an important role on the health of the persons living in the house. Clean water is one of the basic element of PHC. In our survey 80% urban houses are supplied with portable water as compared to 35% in the rural houses, whereas, our more than 75% population is living in the rural areas. Similarly, safe cooking facilities are inadequate in rural houses. Only, 12% of rural houses have gas or electronic cooking facilities Table 2.

Table 2: Household Facilities in Urban and Rural Areas		
	Urban	Rural
	N = 215	N = 415
WATER	%	%
Piped	78.9	34.9
Well	7.9	38.6
Others	13.2	26.5
COOKING FACILITIES		
Wood fire	7.9	63.9
Kerosene oil	23.7	24.1
Gas/Electricity	68.4	12.0

USE OF HEALTH SERVICES

In rural areas 93% of infants were born at home with little or no assistance from a qualified Lady Health Visitor or Dai and only 7 per cent were born in Hospital. Whereas in urban areas 55 per cent babies were born in hospital and 45 per cent at home. Only 8 percent urban mothers had their children routinely medically checked-up and in the rural areas mothers never took their children to health centre for normal medical check-up. They only took the children to health centres when they sick.

INCIDENCE OF BREAST FEEDING

The incidence and duration of breast feeding varies widely in the rural and urban areas. Generally, in urban areas, breast feeding is less common; rural women traditionally breast feed more extensively than urban women. Average duration of breast feeding has been observed to be 5.8 months and 19.2 months in urban and rural communities respectively. Comparing with other Muslim countries, Egypt 15.1 months, Indonesia 26 months,^{1, 2, 4} the incidence is similar. The frequency and length of suckling also differ in rural and urban areas. In urban women the degree of suckling was estimated to represent 9.7% of the day as compared to 24.7% in rural women Table-3. The number of breast feeding per day varies between 7 to 10 and 9 to 14 in the urban and rural women respectively. This frequency, however, decreasing as the baby's age increased. A similar finding was observed by Rao.⁵

Women in the urban areas, influenced by differences in cultural practices and occupational patterns, often have shorten durations of breast feeding than women of rural areas.² Other factors that may affect breast feeding behaviour are education and socio

economic status. Increased socio-economic status has been observed to be associated with decreased duration of lactation among Taiwanese women.⁸

Table 3: Incidence and Duration of Breast Feeding

A: Frequency of Length of Suckling

Urban	9.7% of the day
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Rural 24.7% of the day

B: Number of Breast Feeding

- Urban 7 to 10 per day
- Rural 10 to 14 per day

C: Time Period For Each Breast Feeding

Urban	10 to 20 min. per day
Rural	10 to 30 min. per day

FEEDING OF MILK

The feeding patterns of urban and rural areas are shown in figure 1 and 2 respectively. It was observed that in urban areas 96% infants received breast milk for First 4 months of their life. About 85% of the infants were still breast fed at 12 months but this level dropped to 31% by 2 years. Buffalo milk was given to some infants after the first week of their life. Whereas, powder milk was started in the second month in 25% of infants and in 43% by 6 months.

In contrast to urban areas, infant feeding pattern in rural areas was quite different. Almost all the infants were breast fed at 24 months. Figure-2. However, in some cases mothers started giving buffalo milk or powder milk during the first month.

REASONS FOR STARTING AND STOPPING BREAST FEEDING

Breast feeding is usually started 2 to 3 days after delivery. During the interim babies are given usually water, honey, glucose-water etc. The reasons for starting the breast feeding are shown in table 4. Urban mothers did seem to realize the full benefits of breast feeding. However, 57% rural mothers were of the opinion that breast feeding was natural thing to do: This was mainly from religious point of view. They did not know that breast milk was nourishing for the baby. 20% of the rural mothers said that they did the breast feeding because it was less expensive and about 12% of them did not know why they do the breast feeding.

Table 4: Reason for Starting and Stopping Breast Feeding		
	Urban	Rural
	N = 215	N = 415
Reasons for Starting BF	%	%
Natural thing to do	24.8	57.0
Nourishing for baby	23.2	3.6
Mother had plenty of milk	37.7	7.4
Less expensive	12.2	20.3
Do not know	2.1	11.7

Reasons for	r Stopping BF	
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Baby teething	21.8	16.9
Baby refused	13.7	3.6
Mother pregnant again	36.7	45.8
Insufficient milk	16.2	24.3
Other reasons (e.g. illness)	11.6	6.9

The reason for stopping breast feeding are also given in table 4. In both urban and rural areas, the obvious reason for stopping the breast feeding was next pregnancy, however the percentage was higher in rural than urban women. A similar finding has been reported^{6,7}. It was observed that majority of women continue to breast feed through the 6th month of pregnancy. Teething of the baby and insufficient milk of the mother were other main reasons for stopping the breast feeding. Maternal health status may affect breast-feeding practices through behavioral and physiological factors. Mothers who are ill may decrease their frequency of breast feeding because of fear of passing the illness to infant via the breast milk.

REASONS FOR STARTING INFANT MILK FORMULA

The reasons for starting infant milk formula are given in table 5. The most common reason was that the baby appeared to remain hungry after breast feeding (65.5%). Next reasons were the absence of mother from home due to working (18.77%) and advice received from health personnel (15.8%). The procedures used in the preparation of infant milk are also shown in table 5. 84.2% urban mothers told that they boiled bottle and 71% mothers measure the powder according to the instructions and rest measure by approximation.

Reasons for Startin IMF Baby hungry	*Urban N = 207% 65.6
Mother works	18.7
Received advice from Doctor	15.8
Preparation Procedure	
Boil water	84.2
Boil bottle and tea	70.9
Mesure Powder	71.1

 Table: 5 Reason for Starting Infant Milk Formula

* Only 17 of the rural mothers used IMF, therefore, no analysis was possible for the rural areas.

USE OF SOLID FOOD

It was observed that urban mothers started the cereals in the fourth month of the infant's life. Most of the mothers preferred to use brand name cereals fig.3. In rural areas the use of cereals was less practiced by mothers and traditional cereals are preferred, if used. This may be due to that homemade cereals are less expensive than commercial product Fig. 4.

CONCLUSION

This study gives a cross-section of a society in transition. As in many other developing countries⁹ breast feeding in urban areas of Pakistan is of shorter duration. A change in the socioeconomic status has influenced the mother. A mother must consider, before making decision, the wellbeing of her whole family and not just her new infant.¹⁰ Such decisions are made in the light of background knowledge, resources available to the family and risks involved in different courses of action. Since, back-up facilities are inadequate the mother should weigh actions carefully because the consequences of mistaken decision could be serious.

Fortunately, the shift from breast to bottle has nor progressed as far as in rural areas as in urban areas. If we want to have our mothers to adhere to traditional breast feeding habits, then the government policies should restrict the import of milk-formulas.

Although less advanced than elsewhere, the trend towards artificial feeding is also present in this part of the country. About 20% of population live in urban areas. In our society women often return to their home villages for delivery and spent most of their maternity leave there. This encourages the persistence of traditional patterns of child care and feeding. Nevertheless, the dependence of commercial infant foods is already very real in certain sectors of population.

REFERENCES

- 1. Shamim, M. Breast feeding and weaning mother and child. 1983; 20, 1: 5-8.
- 2. Huffman, S.L., Chawdury, A., Chakraborty, J. and Sipmson, N.I. 1980; 33: 144.
- 3. Lanber, E. and Rein Lardt, M.C. Prolonged lactation performance in a rural community of the Ivory Coast. J. Trop. Rediat. 1981; 27; 74.
- 4. Clayton, D. and Orwell, S. Infant feeding in the Ivory Coast. Food and Nutrition Bull. 1984; 6. 2-6.
- Rao, K.S. Swaminathan, M.C. and Swam, P.S. Protein malnutrition in South India Bull. W.H.O. 1959; 20: 603.
- Obemdorfer, L. and Mejia, W. Statistical analysis of the duration of breast feeding. J. Trop. Rediat. 1968; 4: 27.
- Cantrelle, P. and Leridon, H. Breast feeding mortality in childhood and fertility in a rural zone of Senegal. Pop. studies 1971; 25: 533.
- 8. Jain, A.K., HSU, T.C., Freedman, R. and Chang, W.C. Demographic aspect of lactation and postpartum amenorrhea. Democracy 1970; 7: 255.