

# Breastfeeding Practices Among Mothers in an Urban Polyclinic

C K Siah, MBBS, H Yadav, FAMB

Department of Social and Preventive Medicine, Faculty of Medicine, 50603 Kuala Lumpur

## Summary

A cross sectional descriptive study on breast feeding practices in an urban clinic was conducted among 136 mothers aged between 21-49 years who were interviewed using a questionnaire. Malays constituted 61% of the respondents, Chinese 22.8% and Indians 16.2%. Majority of these were working mothers and although the initiation of breastfeeding was high (99.3%), exclusive breastfeeding was only 12.5%. A large proportion (33.8%) stopped prior to 3 months. Majority of the Chinese mothers (61.3%) stopped before 3 months as compared to the Indian (40.9%) and Malay (21.7%) mothers ( $p < .001$ ). Mean age of introducing complementary foods at 3 months is below the accepted age of 4 to 6 months for weaning. Ever-breast feeding rate is high in this urban setting but more efforts are needed to effect a higher rate of exclusive breastfeeding and longer duration of breastfeeding.

**Key Words:** Breastfeeding, Ever breastfeeding, Predominant breastfeeding

## Introduction

Breastfeeding plays an important and effective role in saving millions of children's lives. UNICEF estimated that, if every baby were exclusively breastfed from birth up to 6 months 1.5 million lives would be saved each year<sup>1</sup>. There have been several studies on infant feeding in Malaysia<sup>2,9</sup>. Most of them showed a decline in the duration of breastfeeding even though the data of ever breastfeeding has improved in recent years. One study showed only 11.7% (CI 9.8-13.6%) continued to breastfeed up to 2 years (20-23 months)<sup>2</sup>.

Breastfeeding has been actively promoted in the country since 1976<sup>3</sup>. Despite this the Malaysian

Population and Family Survey 1984/85<sup>4</sup> showed that the ever-breastfeeding rate for both the Chinese and Indians had declined to 46.0% and 55.0% respectively. However, the Malays had retained the breastfeeding rate at 98%. A repeat study in 1995/1996<sup>2</sup> showed an increase rate among the Chinese to 61.0% and Indians to 83.3% while Malays have kept the rate of about 98%. The objective of this study was to obtain information on the practice of breastfeeding and other aspects of infant feeding among mothers attending an urban polyclinic in the city.

## Materials and Methods

A cross sectional descriptive study on practice of

This article was accepted: 4 April 2002

Corresponding Author: H Yadav, Department of Social and Preventive Medicine, Faculty of Medicine 50603 Kuala Lumpur, Malaysia

breastfeeding was conducted in an urban polyclinic. All mothers in the 15-49 years age group with at least one living child (at least 2 yr. old) who attended the polyclinic off Old Klang Road from the 15<sup>th</sup> of January to 5<sup>th</sup> February 2001 were interviewed using a prepared questionnaire, which had been pre- tested to minimise errors. The questionnaire had both multiple choice and open-ended questions. The interview was conducted by the writer in the polyclinic. Data management and analysis was done using the SPSS (Version 10.)

## Results

There were 149 mothers who attended the polyclinic during this period. Thirteen mothers refused to participate and hence 136 mothers were included in the study. There were 83 (61%). Malays, 31 (22.8%) Chinese and 22 (16.2%) Indians.

### *Maternal age*

The mean age of the mothers was 35 years (range 21-49) and the largest age group was 30-34 where there were 48 (28.4 %) mothers.

### *Maternal education*

Almost all (99.3%) of the mothers had received some formal education with 10 (7.4%) up to primary level, 112 (82.3%) up to secondary level and 13 (9.6%) up to tertiary stage.

### *Maternal working status*

Out of the 65 working mothers, majority 43 (47.8%) were working outside their homes and 12 (8.8%) at home. The latter included tailoring, facial care, agent/stockist for certain products and taking care of neighbour's children. "Working mothers" excluded those who were managing their own homes

### *Financial Status*

The mean total income of the family (husband and/or working wife) of the study population was

found to be RM1,816 with 44.1% earning between RM 1000 to RM1999. However, there were 46.2% who earned RM2,000 and above and 9.4% who earned RM999 and below

### *Types of infant feeding*

Seven mothers could not recall the age of their infants as when supplementary food or fluid was given. Of the remaining 129 only 1 (0.7%) did not breastfeed. The rates of the various breastfeeding practices are shown in Table I.

**Table I: Types of infant feeding practices among mothers who attended the Polyclinic off Old Klang Road during (15<sup>th</sup> Jan to 5<sup>th</sup> Feb 2001)**

Types of infant feeding practices	Number	Percent
Exclusive breastfeeding	17	12.5
Predominant breastfeeding	34	26.5
Complementary feeding	77	60.3
Bottle feeding alone	1	0.7
Total	129*	100

Notes:

- Exclusive breastfeeding is solely breastfeeding for first 4 months of infants' life.
- Predominant Breast-feeding is breastfeeding with addition of water for first 4 months
- Complementary feeding is breastfeeding with addition of other food/fluid as source of nourishment within first to 4 months
- Bottle -feeding is feeding of any liquid or semi-solid food from bottle with teat.

\* 7 mothers could not recall

**Table II: Duration of breastfeeding practice according to various demographic characteristics**

Characteristics	Groups	Duration of breastfeeding (%)				p-value
		<3 mths	4-6 mths.	7-12 mths	>12 mths	
Ethnic group	Malays	21.7	13.3	20.5	44.6	0.000
	Chinese	61.3	19.4	16.1	3.2	
	Indians	40.9	18.2	27.3	13.6	
Maternal age	21-30 yrs	36.2	21.3	23.4	19.1	0.023
	31-40yrs	37.5	8.9	25.0	28.6	
	41-49yrs	22.6	19.4	6.5	51.6	
Level of formal Education	None	100.0	0.0	0.0	0.0	0.211
	Primary	40.0	0.0	50.0	10.0	
	Secondary	31.3	17.0	17.9	33.9	
	Tertiary	46.2	15.4	23.1	15.4	
Working	Yes	28.6	18.6	15.7	37.1	0.129
	No	40.0	12.3	24.6	23.1	
Household income (RM)	400-999	33.3	16.7	25.0	25.0	0.739
	1000-1999	39.3	16.1	12.5	32.1	
	2000-2999	30.4	15.2	19.6	34.8	
	3000-3600	23.1	7.7	38.5	30.8	

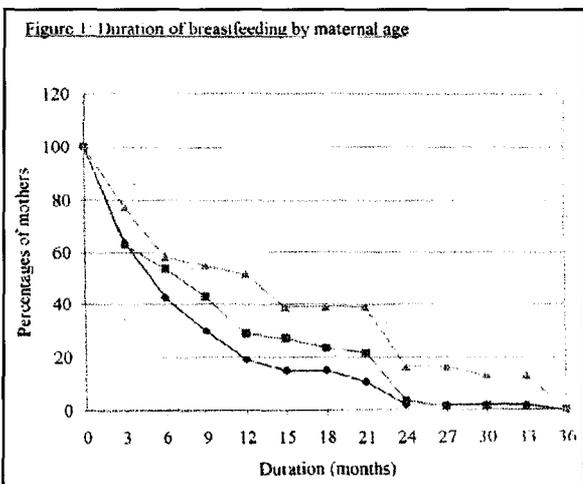
*Duration of breastfeeding*

Of the 136 mothers 99.3% initiated breastfeeding. The median duration of breastfeeding however was only 7.0 months with a large proportion (33.8%) stopping breastfeeding prior to 3 months and 21.3% continuing up to 2 years and beyond. Table II summarises the duration of breastfeeding with respect to the various characteristics of the mother. The duration of breastfeeding was noted to be significantly associated with ethnicity ( $p < 0.000$ ) and maternal age ( $p < 0.05$ ). Older mothers had a larger duration of breastfeeding with 51.6% of mothers in the age group 41-50 breastfeeding beyond 12 months. However there was no significant difference in duration of breastfeeding among mothers of different educational levels, working status and financial status.

The Chinese mothers were found to have the shortest duration of breastfeeding with a majority of them (61.3%) stopping breastfeeding when their infants were only 3 months old. None of them continued breastfeeding beyond 15 months. The Malay mothers were more persistent with the breastfeeding practice with only 21.7% of them stopping at 3 months and 15.4% continued to breastfeed even at 24 months and beyond. Among the Indian mothers, 40.9% stopped breastfeeding at 3 months of infants' age and 9.1% up to 24 months. Older mothers tended to breastfeed for a longer duration (Fig.1).

There were many reasons given for stopping breastfeeding and they included 'insufficient milk' (43.9%), 'child is old enough to stop the practice'

(25.0%), 'child refuses to suck' (13.2%), 'working mother' (10.3%), 'samples of powdered milk were given' (8.8%) and 'pregnant again' (4.4%).



*Time of first suck*

Of the mothers who were delivered in government hospitals 70 (69.3%) were supported to immediately put their babies to the breast whereas only 5 (15.2%) mothers in the private hospitals were encouraged to do so. Of the private hospitals involved 97% gave the mothers the choice of milk feeding, 90.9% provided milk samples and 69.7% did not practice rooming in.

*Supplementary feeding practice*

It was found that the mean age of supplementation was 3.0 months (S.D 1.85) and the exact age varied from one month to 8 months. The type of supplements and age started are shown in Table III.

**Table III: Age at introducing various supplements**

Types of supplement	Age of infants (months)			Total	Percentage of infants
	0-2	3-4	>5		
Formula milk	69	14	14	99	77.4
Cereals	3	43	39	95	74.2
Porridge	0	64	45	109	85.1
Eggs	0	6	40	46	36.0
Fruits	0	20	46	66	51.6
Others	0	1	3	4	3.1

Notes:

Formula milk is any commercially available non-human milk.

Cereals are any commercially available infant cereals.

Porridge is rice cooked with/without vegetables or choice of meat.

(\*Mothers were allowed to give more than one answer)

The main reasons for starting supplementation were, 'perception of inadequacy of breast milk' (56.6%), 'working mother' (34.1%), 'samples of powdered milk given' (17.2%), and 'family member's advice to stop breastfeeding' (10.9%).

## Discussion

This study shows an ever breastfeeding prevalence rate of 99.3% and a median duration of breastfeeding of 7.0 months. This was an improvement from an ever breastfeeding rate of 84.5% reported in National Health Morbidity Survey II (NHMS II)<sup>2</sup>. This improvement could be attributed to the various programmes implemented by the government and non-governmental organisations (NGOs) in the promotion and support of breastfeeding.

The varying results in the duration of breastfeeding among the different ethnic groups are likely due to different social, cultural and religious influences. Similar findings were reported in the NHMS II study<sup>2</sup>.

Maternal age has a significant association with breastfeeding with longer duration seen among older mothers. It was found that 51.6% of the older mothers (41-50 years) continued to breastfeed till 12 months. Similar findings were found in other studies<sup>5</sup> elsewhere<sup>10,11</sup>.

While the level of education has no significant association in this study, it was reported in another study that breastfeeding duration was significantly higher among mothers with primary education (31.5 weeks) than those with tertiary education (24.8 weeks)<sup>2</sup>. Similarly another study in Pakistan<sup>15</sup> showed that the breastfeeding trend fell with level of education. However, in developed countries, the practice of breastfeeding improved with level of education<sup>10,11</sup>.

Although working status of mothers did not seem to affect the duration of the breastfeeding in this study, a survey by Melaka Medical and Health Department, 1985<sup>12</sup>, found that the duration of breastfeeding was longer among the non-working mothers. Studies done in other developing countries<sup>13,14,15</sup> agreed that working mothers had shorter duration of breastfeeding. Similarly in developed countries, working mothers were very much associated with shorter duration of breastfeeding<sup>16,17,18</sup>.

While the income level of the families was not significantly associated with the duration of breastfeeding in this study, other studies have shown an influence of income level on the breastfeeding practice. One study<sup>5</sup> in Malaysia reported that the mean duration of breastfeeding in families with a monthly income of less than RM1,900 was 2.7 months, compared with 2.0 and 1.8 months in those with an income of RM1,901-RM3,230 and RM3,231-RM4,180 respectively. In contrast to this, studies from developed countries have shown a positive correlation of social class with breastfeeding practice<sup>10,11</sup>.

The main reason for termination of the breastfeeding practice being 'insufficient milk' (43.9%) raises the question of whether mothers have been given adequate education and support to enable them to breastfeed longer.

It is also quite worrying that the mean age of supplementation is 3 months in contrast to 4 to 6 months as recommended age by World Health Organisation<sup>19,20</sup>. A similar result was obtained in a study done in rural and semi-urban communities in Kemaman, Terengganu<sup>9</sup> where 42.0% of infants were supplemented prior to the first 3 months. The predominant reasons given by mothers for initiating supplementation were similar to another study done among the Malays in a squatter area<sup>6</sup>. The reasons were, 'mothers not having enough milk' (35.5%), 'working mothers' (18.4%) and 'advised to wean by others' (9.2%). Education and support of mothers need to be improved further to overcome this problem.

## Conclusion

The ever breastfeeding rate in this urban polyclinic was very high. The implementation of the Baby Friendly Hospital Initiative (BFHI) in many hospitals may have created a positive environment in which breastfeeding is the accepted norm. Mothers during pregnancy are encouraged to practice breastfeeding. However more efforts are needed to improve the exclusive

breastfeeding rate and the duration of breastfeeding through education and support.

### Acknowledgements

We wish to thank all the staff in the Old Klang Road Polyclinic who helped during the

collection of data. We also wish to specially thank Dr Htunn Myint Latt who helped in the statistics aspect of this paper and also to Associate Professor Dato' Dr Sirajoon Noor Ghani who gave valuable comments during the preparation of the paper.

### References

1. Breastfeeding: Foundation For A Healthy Future. New York, USA, Division of Communication, UNICEF 1999. (Internet Communication, 29 October 2000 at <http://www.unicef.org>)
2. Public Health Institute, Ministry of Health. Conference on National Health and Morbidity Survey II (1996), 20-22 November 1997. Hospital Kuala Lumpur 1997; 18 (Appendix): 1-17.
3. Abdul Karim H. Infant Feeding Practices among Malay women in squatter areas of Kuala Lumpur and their economic implications, 1984. Institute of Child Health University of London 1984.
4. Malaysian Population and Family Survey (1984/1985). USA, National Population and Family Development Board Malaysia and Rand Corporation 1985.
5. Sinniah D, Chon FM, Arokiasamy J. Infant Feeding Practices among Nursing Personnel in Malaysia. *Acta. Paediatr Scand* 1980; 69: 525-9.
6. Pathmanathan I. Breastfeeding - A study of 8750 Malaysian Infants. *Medical Journal Malaysia* 1978; 33(2): 113-9.
7. Chen ST. Infant Feeding Practices In Malaysia. *Medical Journal Malaysia* 1978; 33(2): 120-4.
8. Yasmin AMY. Infant Feeding Practices and Attitudes of Mothers in Kelantan Towards Breastfeeding. *Medical Journal Malaysia* 1998; 50(2): 150-5.
9. Manan WA. Breastfeeding and infant feeding practices in selected rural and semi-urban communities in Kemaman, Trengganu. *Malaysian Journal of Nutrition* 1995; 1: 51-61.
10. Hally MR, Bond J, Crawley J, et al. Factors Influencing the First Born Infants. *Acta Paediatrica Scand* 1984; 73: 33-9.
11. Wylie J, Verber L. Why women fail to breastfeed: a Prospective study from booking to 28 days post Partum. *Journal Nutr. Dietetics* 1994; 7:115-20.
12. National Coordinating Committee on Food and Nutrition. National Plan of Action For Nutrition of Malaysia (1996-2000) 1995; 43-56.
13. David BC, David PH, Ellozy M. Determinants of breastfeeding duration and nutrition in transition society. *Journal of Tropical Paediatric* 1983; 29: 45-9.
14. Bamisaiye A, Oyediran MA. Breastfeeding among female employee at a Major Institution in Lagos, Nigeria. *Social Science and Medicine* 1983; 17(23): 1867-71.
15. Nagra SA, Gilani AH. Variation in infant feeding practices in Pakistan with the socio-economic stratification. *Journal of Tropical Paediatric* 1987; 33: 103-6.
16. Rousseau EH. Influence of Cultural and Environmental Factors on Breastfeeding. *Canadian Medical Association Journal* 1982; 127: 701-4.

## ORIGINAL ARTICLE

17. Kurinu N. Does Maternal Employment affects Breastfeeding? *American Journal Of Public Health* 1989; 79(9): 1247-50.
18. Sonia GA. Attitudes toward breastfeeding and Infant feeding among Iranian, Afghan and South East Asian Immigrant Women in United States: Implications for health and Nutrition Education. *Journal American Dietetic Association* 1992; 92: 354-5.
19. WHO/UNICEF: Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding in the 1990s: A Global Initiative. Florence, Italy: WHO/UNICEF 1990.
20. Forty-fourth World Health Assembly. Resolution WHA 44.33 on the World Summit of Children: Follow-up action, May 1991.