

ORIGINAL ARTICLE

BREASTFEEDING PRACTICE IN KLANG DISTRICT

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ABSTRACT

This was a cross-sectional study which attempts to determine the prevalence of breastfeeding practice among mothers in Klang district, Malaysia and the association between breastfeeding practice with place of delivery and knowledge on breastfeeding. Data collection was conducted by face-to-face interview using a pre-coded structured questionnaire among mothers with four month old infants only who attended the government clinics in Klang. A total of 508 mothers were recruited into the study. The study showed 92.9% ever breastfed, 55.1% exclusively breastfed for one month and 20.5% exclusively breastfed for four months. Malays breastfed the most, while Chinese the least. Breastfeeding was more common among mothers with lower education, delivered in government hospitals and with good knowledge on breastfeeding. A high proportion of mothers in Klang would initiate breastfeeding and the prevalence of exclusive breastfeeding was comparable nationally. Breastfeeding was associated with mothers delivered in government hospitals and with good knowledge on breastfeeding. Continued promotional efforts targeted at private hospitals with information on breastfeeding should result in further increase in breastfeeding prevalence.

Key words: Breastfeeding, ever breastfed, exclusive breastfeeding, Malaysia

INTRODUCTION

Breastfeeding has been widely acknowledged as the best means of giving infants a healthy start in life. Breast milk is age specific, produced at the correct temperature and without any need for preparation. It not only provides the correct amount and balance of nutrients for optimal growth and development, but also protects against illness¹.

Breastfeeding has been a universal practice in the past. World Health Organization (WHO) supports the conclusion that, as countries undergo socio-demographic development, there is a tendency for the prevalence of breastfeeding to decline^{1,2}. Many factors contribute to such changes in breastfeeding behaviour. Urbanization, modernization and industrialization have been associated with the decline in breastfeeding².

It has been estimated that 98% of mothers are capable of providing breast milk for their own infants¹. The Malaysia Second National Health and Morbidity Study (NHMS-II) in 1996 showed an overall national prevalence of ever breastfed of 88.6% and exclusively breastfed for four months of 29.0%³. Other studies reported prevalence of ever breastfed and exclusively breastfed for four months was between 76% to 99% and 12.5% to 48% respectively^{4,5}.

The objectives of this study was to determine the prevalence of breastfeeding practice among mothers in Klang district, Malaysia and the association between breastfeeding practice with place of delivery and knowledge on breastfeeding.

METHODOLOGY

This was a cross-sectional study to determine the breastfeeding practice among mothers in Klang district. This study was carried out from 17th to 28th July 2006.

This study involved all eight health and nineteen community clinics in the whole of Klang district. Universal sampling was used in this study where all mothers with four month old infants only attending the clinics during the study period were included in the study. Exclusion criteria included mothers who were non Malaysian and infant with serious medical condition. Informed consent was obtained from the respondents. All information was collected by face-to-face interview using a pre-coded structured questionnaire. The interview was conducted by designated and trained staff nurses in each health and community clinics in the district. Bahasa Malaysia was used as the medium of interview since it was the national language and commonly used amongst the interviewers and respondents. The questionnaire and the interviewing nurses used standard terminology and Bahasa Malaysia to ensure mothers' understanding. Socio-demographic data, place of delivery and knowledge on breastfeeding were included in the questionnaire. Mothers who attended a rural clinic were classified as from rural area. Knowledge on breastfeeding was based on the 'Ten Steps to Successful Breastfeeding'⁶ outlined by United Nations Children's Fund (UNICEF)/WHO in the 1980's as tabulated in Figure 1. Respondents who could recall seven or more steps out of the ten steps in any order were classified as having good knowledge.

Fig 1. List of the Ten Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within half an hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drinks other than breast milk, unless medically indicated.
7. Practice rooming-in: that is, allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment on breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

The definitions of breastfeeding used in this study were based on standard definitions by WHO⁶.

* Ever breastfed: The infant receives breast milk (direct from the breast or expressed) with or without any other drink, formula or other infant food.

* Exclusively breastfed: Breastfeeding while giving no other food or liquid, not even water, with the exception of drops or syrups consisting of vitamins, mineral supplements or medicine.

All variables listed in the questionnaire were coded and entered into Statistical Package for the Social Sciences,

release 11.0 (SPSS Inc., Chicago, IL, USA). Descriptive statistics were generated for demographic factors and χ^2 test was used to test the associations between breastfeeding practice with place of delivery and knowledge on breastfeeding.

RESULTS

A total of 508 respondents were included in the study with 278 (54.7%) Malays followed by Indian 90 (17.7%), Chinese 82 (16.1%) and other ethnic group 58 (11.4%).

Table 1. Socio-demographic data among the respondent (n = 508)

	Characteristics	n	%
Age (years)	< 24	106	20.9
	24 - 28	152	29.9
	29 - 33	144	28.3
	> 33	106	20.9
Mean (SD) Age :	28.7 (5.6) years		
Ethnicity	Malay	278	54.7
	Chinese	82	16.2
	Indian	90	17.7
	Others	58	11.4
Occupation	Professional & Management	6	1.2
	Office Work	58	11.4
	Labour Work	180	35.4
	Housewife	264	52.0
Education Level	University/Diploma	78	15.4
	Secondary School	368	72.4
	Primary School	54	10.6
	None	8	1.6
Area	Rural	160	31.5
	Urban	348	68.5
Parity	1	160	31.5
	2 - 5	306	60.2
	> 5	42	8.3
Place of Delivery	Government Hospital	458	90.2

The mean (SD) age of the respondents was 28.7 (5.6) years. Majority of them were housewife, from urban area, with parity between two to five, had secondary education and delivered in a government hospital (Table 1).

In this study, 472 (92.9%) of the respondents ever breastfed, 280 (55.1%) exclusively breastfed for one month while 104 (20.5%) exclusively breastfed for four months (Figure 2).

Fig 2. The prevalence of 'Ever', 'Exclusively for One Month' and 'Exclusively for Four Months' breastfed among the respondent

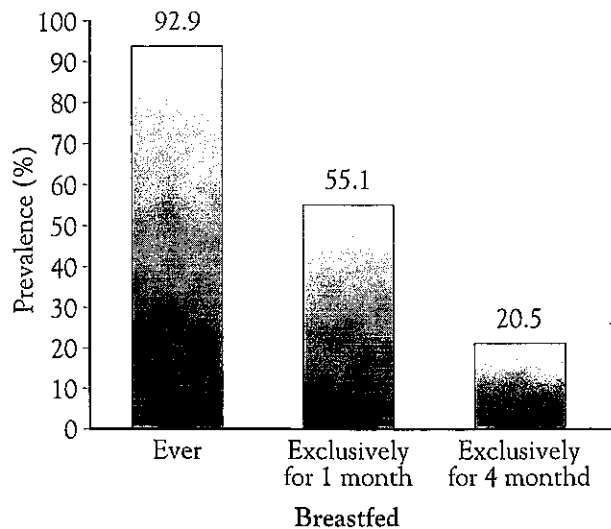


Table 2 showed breastfeeding practice was most common among the Malays and least common among the Chinese. Respondents working as professional and management group breastfed the least. Breastfeeding practice was more common and continues among housewife and mothers who does labour work. Breastfeeding was more common among mothers with secondary school education. Breastfeeding was more common among mothers from urban areas and mothers with between 2 to 5 children.

Table 3 showed the association between breastfeeding practice and place of delivery. Breastfeeding was more common among mothers delivered in government hospitals. There was statistically significant difference in the prevalence of breastfeeding in exclusively breastfed for one month ($p=0.004$) and exclusively breastfed for four months ($p < 0.001$).

Table 4 showed the association between breastfeeding practice and knowledge on breastfeeding. Breastfeeding was more common among mothers with good knowledge on breastfeeding. There was statistically significant difference in the prevalence of breastfeeding in ever breastfed ($p < 0.001$) and exclusively breastfed for one month ($p < 0.001$).

Table 2. Breastfeeding practice among the respondent by socio-demographic characteristics

Characteristics		Breastfed		
		Ever (n = 472) n (%)	Exclusively for one month (n = 280) n (%)	Exclusively for four months (n = 104) n (%)
Age (years)	< 24	96 (20.3)	54 (19.3)	20 (19.2)
	24-28	150 (31.8)	76 (27.1)	34 (32.7)
	29-33	134 (28.4)	90 (32.1)	26 (25.0)
	> 33	92 (19.5)	60 (21.4)	24 (23.1)
Ethnicity	Malay	274 (58.1)	200 (71.4)	72 (69.2)
	Chinese	64 (13.6)	14 (5.0)	4 (3.8)
	Indian	84 (17.8)	24 (8.6)	10 (9.6)
	Others	50 (10.6)	42 (15.0)	18 (17.3)
Occupation	Professional & Management	6 (1.3)	4 (1.4)	0 (0)
	Office Work	56 (11.9)	30 (10.7)	8 (7.7)
	Labour Work	164 (34.7)	86 (30.7)	40 (38.5)
	Housewife	246 (52.1)	160 (57.1)	56 (53.8)
Education Level	University/ Diploma	72 (15.3)	44 (15.7)	14 (13.5)
	Secondary School	346 (73.3)	196 (70.0)	74 (71.2)
	Primary School	48 (10.2)	36 (12.9)	16 (15.4)
	None	6 (1.3)	4 (1.4)	0 (0)
Area	Rural	152 (32.2)	78 (27.9)	30 (28.8)
	Urban	320 (67.8)	202 (72.1)	74 (71.2)
Parity	1	142 (30.1)	60 (21.4)	22 (21.2)
	2 - 5	290 (61.4)	184 (65.7)	70 (67.3)
	> 5	40 (8.5)	36 (12.9)	12 (11.5)

Table 3. Association between breastfeeding practice and place of delivery

Breastfed		Place of Delivery		χ^2	p-value
		Government	Private		
Ever	Yes	430 (93.9)	42 (84.0)	6.69	0.01
	No	28 (6.1)	8 (16.0)		
Exclusively for one month	Yes	262 (57.2)	18 (36.0)	8.19	0.004*
	No	196 (42.8)	32 (64.0)		
Exclusively for four months	Yes	104 (22.7)	1 (2)	14.28	< 0.001*
	No	354 (77.3)	49 (98)		

* statistically significant at $p < 0.05$

Table 4. Association between breastfeeding practice and knowledge on breastfeeding

Breastfed		Knowledge on Breastfeeding		χ^2	p-value
		Good	Poor		
Ever	Yes	294 (97.4)	178 (86.4)	22.27	< 0.001*
	No	8 (2.6)	28 (13.6)		
Exclusively for one month	Yes	186 (61.6)	94 (45.6)	12.61	< 0.001*
	No	116 (38.4)	112 (54.4)		
Exclusively for four months	Yes	64 (21.2)	40 (19.4)	0.24	0.626
	No	238 (78.8)	166 (80.6)		

* statistically significant at $p < 0.05$

DISCUSSION

The result from the study population showed that the prevalence of ever breastfed was 92.9%, exclusively breastfed for one month was 55.1% and exclusively breastfed for four months was 20.5%. This result compared well with the national figures³ and other studies done in Malaysia^{4,5,7,8}. Malay ethnic mothers breastfeed the most, while Chinese the least. Ever breastfed was commonest among Malays (58.1%) which compared well with other studies^{3,5,7}. Exclusively breastfed for four months among Malays of 69.2% was comparable to other studies quoting between 54% and 72%^{3,4,5,7}. Ever breastfed among other ethnic groups in this study was comparable but exclusively breastfed for four months was lower than other studies^{3,4,5,7}. Breastfeeding practice among Chinese compared well with the Chinese population in Singapore⁹ and Malaysia¹⁰. Chinese have traditionally considered it degrading to have to breastfeed their babies personally. Only the poorest mothers in China used to breastfeed their own infants while well-to-do mothers almost invariably employed a wet nurse to breastfeed their infants⁹.

Continued breastfeeding was more common among housewife and secondary school level of education. These findings were comparable to studies done in Malaysia^{4,5,7,8,11,12} and Singapore⁹. In Malaysia, working mothers were given only two months maternity leave and facilities for breastfeeding at work place were not acceptable or flexible. This situation and condition would deter working mothers from continued breastfeeding as compared to housewife¹³.

Breastfeeding practice was common among mothers from rural compared to urban area. This finding was consistent with other studies in different areas^{3,8,9,11,12}. Mothers from rural area were mainly from lower income families, low education level, non working and extended family support. This would contribute to higher breastfeeding practice among mothers in rural areas.

Breastfeeding practice was commoner among mothers with 2 to 5 children. This finding was comparable to the study conducted in Kuala Lumpur⁷ and Hong Kong¹⁴. Report showed mothers with their first child were less knowledgeable and skillful in breastfeeding. This caused low self confidence among mothers to breastfeed their infants. In Eastern society, it is common for mother-in-laws to accompany mothers during the confinement period especially after the first delivery. They will influence their anti-breastfeeding ideas and thoughts to the mother¹⁴.

Breastfeeding practice was common among mothers delivered in government compared to private hospitals. Chan and Asirvatham⁴ showed the same result. Malaysia has adopted the Baby Friendly Hospital Initiative by WHO/UNICEF⁶ to promote and protect breastfeeding among mothers in almost all of its government hospitals. However, most private hospitals in Malaysia did not adopt the Initiative. Necessary knowledge, skill and support for mothers to breastfeed were more common in the government compared to private hospitals.

Breastfeeding practice was common among mothers with

good knowledge on breastfeeding. In order for a mother to breastfeed her infant, adequate knowledge was needed. Study done in the United Kingdom showed significantly more mothers who attended the workshop focusing on knowledge, skills and attitude towards breastfeeding would breastfeed and continue to do so after three months compared to the control group¹⁵.

In conclusion, this study showed the prevalence of ever breastfed was 92.9%, exclusively breastfed for one month was 55.1% and exclusively breastfed for four months was 20.5% among mothers with four month old infants in Klang district. Breastfeeding was associated with mothers delivered in government hospitals and with good knowledge on breastfeeding. Continued promotional efforts targeted at private hospitals with information on breastfeeding should result in further increase in breastfeeding prevalence.

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