

**ORIGINAL ARTICLE**

# Breast Feeding Practice and Knowledge among Mothers Attending an Urban Malaysian Maternal and Child Health Clinic

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## **ABSTRAK**

Kelebihan penyusuan ibu telah pun lama terbukti. Objektif kajian ini adalah untuk mengenalpasti amalan dan pengetahuan penyusuan ibu di dalam komuniti di dalam bandar dan faktor-faktor yang mempengaruhinya. Ini adalah kajian irisan lintang. Kesemua ibu-ibu yang memenuhi kriteria pemilihan dan menghadiri Klinik Kesihatan Ibu dan Anak di Cheras sepanjang tempoh kajian ini dimasukkan ke dalam kajian. Ibu-ibu tersebut dikehendaki menjawab soal selidik yang diberi. Seramai 162 ibu telah mengambil bahagian di dalam kajian ini. Didapati prevalen penyusuan ibu dalam minggu pertama selepas bersalin adalah 93.8%. Kajian ini mendapati penyusuan ibu adalah lebih tinggi di kalangan ibu Melayu ( $p < 0.001$ ). Tahap pendidikan ibu, status perkerjaan, perkerjaan suami, pendapatan keluarga dan kelas antenatal tidak mempunyai hubungan yang bermakna dengan amalan penyusuan ibu. Walaubagaimanapun, pengaruh daripada ahli keluarga utama didapati menjadi faktor penting dalam memberi galakan kepada penyusuan ibu. Secara menyeluruh, pengetahuan mengenai penyusuan ibu adalah baik, tetapi lebih daripada separuh responden (58.6%) tidak tahu bahawa mereka perlu meneruskan penyusuan ibu jikalau ibu ataupun anak jatuh sakit. Kajian ini menemui bahawa lebih daripada 20% responden masih tidak tahu mengenai 'lactational amenorrhoea' (tiada haid disebabkan penyusuan ibu), 'susu ibu melindungi bayi daripada alahan' dan 'luka pada puting adalah satu kebiasaan dalam penyusuan ibu'. Lebih kurang 15% daripada ibu-ibu masih tidak tahu bahawa susu ibu adalah lebih baik daripada susu formula. Kesimpulannya, walaupun prevalen inisiasi penyusuan ibu adalah tinggi di kalangan ibu-ibu, masih terdapat tanggapan-tanggapan yang salah yang perlu diperbetulkan.

*Kata kunci:* penyusuan ibu, amalan, pengetahuan, kelas antenatal

## **ABSTRACT**

The advantages of breastfeeding have been well established. The objective of this study was to determine the practice and knowledge of breastfeeding in an urban community and identify the influencing factors. This is a cross-sectional study. All

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mothers attending the Maternal and Child Health Clinic during the study period, who fulfilled the selection criteria, were included in the study. The mothers were interviewed using a self administered questionnaire. A total of 162 mothers participated in the study. The prevalence of initiating breastfeeding during the first week after childbirth was 93.8%. Breastfeeding was found to be higher among Malay mothers ( $p$  value  $<0.001$ ). Mother's education level, employment status, husband's occupation, family income and attending antenatal classes did not show significant association with breastfeeding practice. Influence from significant family members was found to be an important factor towards encouragement of breastfeeding. Overall, the mother's knowledge on breastfeeding was fairly good. However, more than half (58.6%) did not know that they should continue breastfeeding even if the mother or the baby were sick. More than 20% of the mothers were still ignorant regarding 'lactational amenorrhoea', breast milk protection against allergy and that nipple soreness is common when breastfeeding. Approximately 15% of the mothers were not aware that breast milk is better than formula milk. In conclusion, although the mother's knowledge on breastfeeding was fairly adequate, misconception in certain areas of breastfeeding needs correction.

**Key words:** breastfeeding, practice, knowledge, antenatal class

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## INTRODUCTION

World health and scientific organisations have endorsed breastfeeding as the best way of feeding infants. Breast milk lowers the incidence of gastrointestinal tract problems, infections, allergies and overweight in the breastfed infants. There is also a decreased risk of death from sudden infant syndrome. Besides that, mothers who breastfeed have a lower risk of ovarian, uterine and breast cancer, better child spacing and maternal attachment with their newborn (Malrides 1995)

Malaysian culture traditionally accepted breastfeeding as the normal and healthy way of nourishing a newborn child. With the introduction of Western culture, however, bottle-feeding was introduced and is now viewed as a "modern" mother's way of providing nutrition to infants (Kang 1999). The National Health and Morbidity Study in 2006, reported a high proportion of Malaysian mothers initiating breastfeeding but the practice of exclusive

breastfeeding for four to six months was low (14.5%) (Ministry of Health 2006). The prevalence of breastfeeding in Malaysia declined from 92% to 78% from 1950 to 1975 however it increased to 89% by 1996 (Ho et al. 1999). A study done in 1996 among Malay mothers in Kelantan found that almost all mothers (97.3%) breastfed their children, indicating a high incidence of breastfeeding among rural Malay mothers (Zulkifli et al. 1996). The current study was designed to determine the practice of initiating breastfeeding among mothers in an urban community, its associated factors, and evaluate the mothers' knowledge regarding breastfeeding.

## MATERIALS AND METHODS

This was a cross-sectional study conducted among mothers attending a Child Health Clinic in Cheras Baru, Kuala Lumpur between March and April 2008. All mothers who attended the clinic during the study period who fit the selection

criteria were included into the study. Inclusion criteria were mothers aged from 17 to 45 years old who gave consent to answer the questionnaire. Exclusion criteria were primigravida (no experience in breast feeding) and non-Malaysian.

Respondents were given a self-administered questionnaire and were assisted by interviewers when necessary. Respondents' data were collected via questionnaire. The questionnaire consisted of two parts. The first part was on socio-demographic data and the second part was on breastfeeding knowledge.

Successful initiation of breastfeeding was defined as mothers who breastfed

their child for at least one week after delivery (Khairani 1998). "Significant family members" was defined as respondent's spouse and family members who stayed in or close by her residence.

All data were entered and analyzed using the Statistical Analysis for Social Science (SPSS) windows, version 14.0. A p value of less than 0.05 was taken to denote statistical significance.

## RESULTS

A total of 162 mothers were included in the study. It was found that 152 mothers practiced breastfeeding at least one

**Table 1 :** Association between breastfeeding with socio-demographic characteristics and environmental factor

Variables	Breastfeeding		Non-breastfeeding		p value
	n	%	n	%	
<i>Sociodemographic characteristics</i>					
<b>Age group(years)</b>					
17-24	26	17.1	1	1.1	0.217
25-34	98	64.4	9	90.0	
≥ 35	28	18.4	0	0.0	
<b>Ethnicity</b>					
Malay	117	98.3	2	1.7	<b>&lt;0.001</b>
Non Malay	35	81.4	8	18.6	
<b>Mother's Education level</b>					
Upper secondary or tertiary education	44	94.7	8	5.3	0.231
Lower secondary or less	8	80.0	2	20.0	
<b>Mother's Employment status</b>					
Yes	89	93.7	6	6.3	0.988
No	63	94.0	4	6.0	
<b>Husband's occupation</b>					
Professional	25	96.2	1	3.8	0.926
Non professional	127	93.4	9	6.6	
<b>Family income</b>					
RM >1500	112	94.9	6	5.1	0.565
RM ≤1500	40	90.9	4	9.1	
<i>Environmental factor</i>					
<b>Encouragement from significant family members</b>					
Yes	109	99.1	1	0.9	<b>0.001</b>
No	42	95.5	2	4.5	

week after delivery giving a prevalence of 93.8%. The mother's characteristics are summarized in Table 1.

Mothers who practise breastfeeding were predominantly Malay. Influence from significant family members was found to be an important factor towards encouragement of breastfeeding. In this study, mother's age, education and employment status, husband's occupation and family income did not show any significant association with breastfeeding.

Figure 1 shows the source of knowledge about breastfeeding among the respondents. The top three important sources found in this study were healthcare personnel (25.0%), mass media (books and magazines) (21.2%) and parents or relatives (18.5%).

Table 2 shows the relationship between antenatal class and breastfeeding practice. More than half of the respondents (55.6%) attended antenatal education about breastfeeding when they were pregnant. In the breastfeeding group, 85 respondents (55.9%) had formal antenatal education on breastfeeding. However, attending antenatal classes did not significantly increase the practice of breastfeeding.

Table 3 illustrates the assessment of knowledge on breastfeeding among the mothers. Overall, the mothers' know-

ledge on breastfeeding was fairly good. However, more than half of the mothers thought that 'they should stop breastfeeding if either or both of baby and mother is/are sick.' More than 20% of the mothers were still ignorant regarding lactational amenorrhoea, breast milk protection against allergy and the prevalence of sore nipples. Approximately 15% of the mothers did not know that breast milk is better than formula milk and about 9% were not knowledgeable regarding the benefits of colostrum.

### DISCUSSION

The prevalence of breastfeeding in this study was 93.8%. The prevalence was comparatively similar to previous studies done in Malaysia (Ho et al. 1999; Zulkifli et al. 1996). The high prevalence of breastfeeding is viewed as a result of greater awareness of the benefits to health and nutrition for breast fed infants. However, this study did not assess if the mothers continued breastfeeding beyond a week. It had been reported that a high proportion of Malaysian mothers initiated breastfeeding but the practice of exclusive breastfeeding for four to six months was low (Ministry of Health 2006).

In this study, Malay mothers were more likely to breastfeed than non-Malay. The

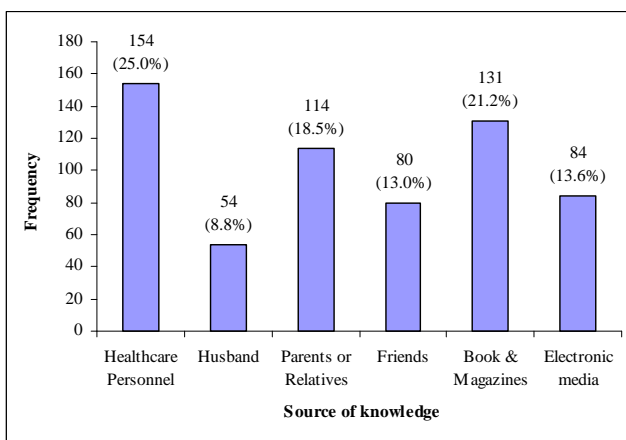


Figure 1: Source of knowledge (N=162)

**Table 2** : Antenatal class and breastfeeding practice

		Breastfeeding practice					
		Yes		No		Total	
		n	%	n	%	n	%
<b>Antenatal class</b>	<b>Yes</b>	85	94.4	5	5.6	90	100.0
	<b>No</b>	67	93.1	5	6.9	72	100.0
	<b>Total</b>	152	93.8	10	6.2	162	100.0

$\chi^2$  (with Yates correction) = 0.001, p = 0.971

**Table 3** : Knowledge of breastfeeding.

QUESTIONNAIRE ITEMS	Correct answer		Incorrect answer		Don't know	
	n	%	n	%	n	%
1. A woman who is fully breastfeeding is less likely to become pregnant three months after delivery than a woman who is formula feeding.	115	71.0	21	13.0	26	16.0
2. A breastfed baby is protected against gastrointestinal infection.	145	89.5	10	6.2	7	4.3
3. A breastfed baby is not protected against allergy.	35	21.6	111	68.5	16	9.9
4. Breastfeeding should be initiated immediately after birth.	159	98.1	2	1.2	1	0.6
5. Frequent breastfeeding in the early newborn period can help reduce jaundice.	144	88.9	4	2.5	14	8.6
6. Mothers intending to breastfeed should expect sore nipples as a normal part of breastfeeding.	126	77.8	24	14.8	12	7.4
7. Exclusive breastfeeding should be practiced for first 6 months.	142	87.7	11	6.8	9	5.6
8. Breastmilk and formula milk provides same health benefits for infants.	139	85.8	18	11.1	5	3.1
9. Colostrum is good for baby.	148	91.4	4	2.5	10	6.2
10. Breastfeeding should be stopped if either/both of baby and mother is/are sick.	67	41.4	78	48.1	17	10.5

result is supported by The National Health and Morbidity study done in Malaysia (Ministry of Health 2006). In the Malay culture and Islamic religion, mothers are encouraged to breastfeed their

children and this could explain the high breastfeeding prevalence in this ethnic group (Councilman & Viegas 1985).

The findings in this study showed that a woman's partner and family play an im-

portant role in her decision to breastfeed. This finding is supported by western studies which reported positive association between partner's support for breastfeeding with initiation as well as duration of breastfeeding (Scott et al. 2001). Thus, significant family encouragement is a positive predictor for breastfeeding practice.

Previous studies showed that educated women were more likely to breastfeed their children (Simard et al. 2005; Lin et al. 2004). The father's education level, too, has an enhancing effect on breastfeeding (Newton 2004). However some studies found the opposite (Mohammad et al. 2006; Li et al. 2002). Likewise our finding did not support these relationships. The prevalence of initiating breastfeeding had no significant association with mothers' employment status, husband's occupation or family income.

Antenatal class is the medium for providing information which includes promotion of breastfeeding. Systematic reviews conclude that educational programs are more effective at improving breastfeeding initiation (Dyson et al. 2005; Guise et al. 2003) than literature alone (Fairbank et al. 2000). However, previous studies had reported that participation in antenatal class had no significant association with prevalence of initiating breastfeeding (Citra et al. 2007; Foo et al. 2005). A possible explanation for this could be that those who did not attend received support and knowledge from other sources.

With regard to knowledge on breastfeeding, the majority of respondents knew that breastfeeding should be initiated immediately after birth and exclusive breastfeeding should be practised for the first six months. This could be due to the successful breastfeeding promotion practiced in many government and private hospitals. However it is a concern that approximately 15% of the mothers did not know that breast milk is better than formula milk and about 9% were not

knowledgeable regarding the benefits of colostrums. Almost half of the mothers thought that breastfeeding should be discontinued when either mother or child is sick. This misconception should be corrected by health providers during the breastfeeding educational programmes. In addition, more than 20% of mothers were still ignorant regarding lactational amenorrhoea, protection against allergy and that sore nipple is a common problem when breastfeeding. These are some areas of breastfeeding that need to be addressed and given more emphasis to mothers to improve their knowledge of breastfeeding.

Overall, the mothers' knowledge on breastfeeding was fairly good except for certain areas mentioned above. This may reflect successful antenatal programmes initiated by our society. It could also be explained by the great effort from health personnel in delivering talks on the benefits of breastfeeding. This is shown by the findings in this study, where the top three sources of knowledge about breast feeding indicated by the mothers were healthcare personnel, mass media (books and magazines) and parents. These main sources of knowledge can be used as a channel to correct misconceptions and improve mothers' knowledge on breastfeeding.

## CONCLUSION

The prevalence of initiating breastfeeding among mothers attending the Maternal and Child Health clinic was high. Majority of the mothers had adequate knowledge regarding breastfeeding, however certain areas such as 'continuing breastfeeding when either mother or child is sick', lactational amenorrhoea, protection against allergy and 'sore nipple is a common problem when breastfeeding' need more emphasis during future educational programmes. Influence from close family members was significantly associated

with breastfeeding practice. Thus, it would be beneficial to include close family members during health education programmes to promote breastfeeding.

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