ORIGINAL ARTICLE

Knowledge, Attitudes and Sources of Information on Breastfeeding among Pregnant Mothers

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ABSTRAK

Ini adalah suatu kajian cross-sectional pada 218 orang ibu mengandung di suatu hospital kerajaan di bandar. Kajian ini bertujuan menilai pengetahuan, sikap dan sumber maklumat berkenaan penyusuan susu ibu. Hasil kajian boleh digunakan untuk promosi penyusuan. Hampir semua responden (96.8%) berniat menyusui bayi. Kebanyakan daripada mereka (74.8%) berpengetahuan luas mengenai penyusuan iaitu kolostrum and susu ibu adalah makanan terbaik; ia melindungi bayi daripada penyakit dan alahan; mengenyangkan; membantu perkembangan gigi bayi dan penyembuhan ibu selepas bersalin; merapatkan jalinan; senang didapati dan menjimatkan. Terdapat dua tanggapan salah iaitu peyusuan patut diberhentikan jikalau ibu atau bayi jatuh sakit, dan pemberian air kepada bayi yang menerima penyusuan ibu sepenuh untuk mengelakkan dari penyahhidratan. Kebanyakan ibu (83.9%) memberikan respons positif kepada penyusuan ibu: penggunaannya lebih mudah dari formula bayi; tiada kesan negatif kepada perhubungan perkahwinan atau penjagaan keluarga; akan memulakan penyusuan sebaik sahaja bayi dilahirkan; bersetuju dengan pelarangan susu botol dan puting di hospital dan mereka tidak akan berhenti penyusuan ibu walaupun dihalangi suami. Hanya 56.9% para ibu percaya mereka sanggup memberi penyusuan ibu di mana-mana sahaja. Sumber utama maklumat mengenai penyusuan ibu ialah daripada media massa (34.9%), kelas antenatal (32.1%) dan ibu lain yang berpengalaman.

Kata kunci: Penyusuan Ibu, Pengetahuan, Sikap, Kelas Antenatal.

ABSTRACT

This is a cross-sectional study on 218 pregnant mothers in an urban government Hospital. The study aimed to assess knowledge, attitudes and sources of information on breastfeeding. The results could be utilised to promote breastfeeding. Almost all the respondents (96.8%) intended to breastfeed their newborns. Most of them (74.8%) were knowledgeable about breastfeeding i.e. colostrum and breast milk was the best food, good for resistance against disease and allergy, filling up stomach easily, helpful in teeth development and maternal recovery after birth, increased bonding, was easy and economical. The two main misconceptions were mothers would stop breastfeeding when infant or mother was sick, and giving clear fluid to the exclusively breastfeed infants to prevent dehydration. Most mothers (83.9%) responded positively towards breastfeeding

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i.e. it was easier than infant formula, had no negative effect on marital relationship or family care, would commence breastfeeding straight after delivery, agreeable to the banning of bottles and teats in hospital and they would not stop breastfeeding even if husband discouraged them. Only 56.9% of the mothers believed they could breastfeed their babies with modesty anywhere. The main sources of information were attained from the mass media (34.9%), antenatal class (32.1%) and other mothers with breastfeeding experiences.

Key Words: Breastfeeding, knowledge, attitude, antenatal class

INTRODUCTION

Breastfeeding (BF) is widely recognised to be the optimal way to nourish and nurture infants. Even with the addition of complementary foods in the second half of the first year, BF continues to be of nutritional, immunological, and psychological signifycance well into the second year and beyond (Cadwell 2002). The Innocenti Declaration on Protection, Promotion and Support of Breastfeeding 1990 recognised that BF was a unique process with manifold advantages (WHO/UNICEF 1990).

In order to achieve global goal for optimal maternal and child health and nutrition. Baby-Friendly the Hospital Initiative (BFHI) was launched in 1991 by the World Health Organisation (WHO) and United Nations Children's Fund (UNICEF) to ensure that all maternity facilities, whether free standing or in a hospital, became centres of BF support. A maternity facility could be designated 'baby-friendly' when it did not accept free or low-cost breast milk substitutes, feeding bottles or teats, and had implemented 10 specific steps to support successful breastfeeding (UNICEF website).

The Ministry of Health of Malaysia had been exemplary in its pursuit of the BFHI accreditation. In March 1998, Malaysia was recognised by WHO as the only third world country, after Sweden and Oman, to have successfully accredited all its government hospitals as Baby-Friendly Hospitals. As of July 2005, 117 hospitals in Malaysia were accredited as Baby-Friendly Hospitals (UNICEF 2005a). Despite all these effort, the State of the World's Children 2005 (UNICEF 2005b) reported that only 29% of babies in Malaysia were exclusively breastfed for the first 6 months from 1996-2005.

OBJECTIVE

The general objective of this study was to assess the knowledge and attitude towards breastfeeding among our pregnant mothers. The prevalence of those who plan to breastfeed and the main source of information about BF were determined.

METHODS

This study was conducted in Selayang Hospital, which was a tertiary referral centre with 960 inpatient beds and 20 clinical disciplines located in the Gombak District of Selangor. It was a Baby-Friendly hospital supporting breastfeeding. The Obstetric and Gynaecology Department took over full obstetric and antenatal coverage including networking of the Northern Zone of Selangor. In 2006, the total number of deliveries in the hospital was 10,790 cases.

This was a cross-sectional study using structured questionnaires to interview pregnant mothers attending the antenatal clinic from 1/3/07 to 31/3/07.Universal sampling method was used. All pregnant mothers who were present for the antenatal sessions within the study period

were recruited.

Using a structured anonymous questionnaire, the sampled pregnant mothers who had given verbal consent to participate in the study were interviewed. The questionnaire encompassed demo-graphic data, knowledge and attitude towards breastfeeding, and main source of information. Respondents who answered at least 70% of the questions correctly were perceived as having high level of knowledge. Those who answered at least 70% of the questions correctly regarding attitude were regarded as having positive attitude towards BF.

The questionnaires were pre-tested in a different group of antenatal patients prior to the actual study. Analysis of the collected data was done by using SPSS version 12.0.

RESULTS

A total of 288 pregnant mothers attended the antenatal clinics during the study period. Seventy were excluded from the study as 42 of them refused to be interviewed, 27 left the clinic before being interviewed and one of them being a foreigner had language barrier. The remaining 218 were successfully recruited making the response rate of 75.69%, which was within acceptable percentage.

The respondents' age ranged between 16 – 46 years (mean age of 30.4 years, SD of 5.3 years). The majority of respondents were multigravida (72.9%), being Malay (61.5%) and were married (99.5%). Most of them were housewives (45.4%), attaining at least secondary educational level (85.3%). Only 29.4% of respondents had total household income of less than RM 2,000 per month. Table 1 shows the demographic data of the respondents.

Almost all (96.8%) intended to breastfeed their newborns, the rest were either had no intent or was undecided.

Majority of the pregnant mothers (74.8%) scored high marks in breastfeeding knowledge with total score of more than 70%. Most of them (95.9%) knew that breast milk was the best infant food. Almost all of the respondents agreed that breast milk was good for infant's resistance towards disease (96.3%), and BF increased bonding between mother and infant (97.2%). Breast milk was mentioned as easy and economical for their infant by 93.1% of the respondents. Most mothers (82.1%) knew that BF helped them in childbirth recovery. Breast milk was recognised as a well-balanced nourishing food for infant, and good for avoiding infant

 Table 1:
 Demographic profile of the study sample (n=218)

	No. of		
	cases	%	
Age (years)			
<20	3	1.4	
20-24	27	12.4	
25-29	68	31.2	
30-34	72	33.0	
>35	48	22.0	
Parity			
Primigravida	59	27.1	
Multigravida	159	72.9	
Race			
Malay	134	61.5	
Chinese	51	23.4	
Indian	29	13.3	
Others	4	1.8	
Educational Level			
None	4	1.8	
Primary	28	12.8	
Secondary	129	59.2	
Tertiary	57	26.1	
Marital Status			
Married	217	99.5	
Unmarried	1	0.5	
Occupation			
Director/ Manager	1	0.5	
Business/ Merchant	5	2.3	
Secretary/ Clerical	39	17.9	
Professional	24	11.0	
Housewife	99	45.4	
Others	50	22.9	
Monthly Total			
Household Income (RM)			
≤1,999	64	29.4	
2,000-3,999	116	53.2	
4,000-5,999	24	11.0	
6,000-7,999	11	5.0	
8,000-9,999	1	0.5	
≥10,000	2	0.9	

allergy by 97.2% and 83.9% of respondents respectively. Mothers knew that breast milk helped infant teeth development (64.2%) and filled up the stomach more easily (73.9%). Majority of the respondents (71.6%) agreed that BF helped to reduce maternal weight. Many mothers (45.4%) thought they should stop BF when infant and/ or mother was sick. Most of them (63.3%) would give clear fluids to the newborn even in exclusive BF to prevent dehydration. Colostrum was known to be good for their infants by 82.6% of respondents. The majority of mothers (81.2%) knew the correct age of weaning. The responses to knowledge of BF are shown in Table 2.

Most mothers (34.9%) gathered BF information from the mass media e.g. television programs, Internet, magazine, newspaper and etc; followed by antenatal class organised by midwives and nurses in the hospitals and health care centres (32.1%). They also gained knowledge from other mothers with BF experience (27.5%) and other personnel (5.5%) e.g. nurses or doctors in clinics or hospitals. Figure 1 summarises the main source of information about BF.

When assessing their attitude, 183 (83.9%) mothers responded positively towards BF. Most of them (86.2%) considered BF as being easier than feeding with infant formula. Most mothers (92.2%) denied BF had negative effect on marital relationship. Majority of respondents (91.7%) did not think that BF would make it difficult in taking care of their family. Only 56.9% of the mothers believed they could breastfeed their babies with modesty anywhere. The commencement of BF straight after delivery was known to be important by 98.6%. Many respondents (68.3%) agreed with the banning of the usage of bottles and teats in any hospital unless prescribed by doctor. Overall, 84.9% of the respondents believed that the community encouraged BF rather than infant formula feeding. Many of them (83.0%) would not stop BF when there was

discouragement from their husband. The responses of attitude toward BF are shown in Table 3.

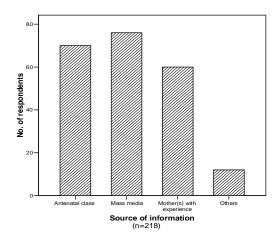
DISCUSSION

This study showed that most mothers were knowledgeable and supportive towards BF. The overall prevalence of those who intended to breastfeed their babies was high at 96.8%. Though the respondents were pregnant mothers who had not started BF, their early decision would pose a positive bearing after childbirth. A study by Hoyer et al had shown that the time of decision to breastfeed was important for the length of BF (Hoyer & Pokorn 1998). In her study, 77.3% of mothers decided to breastfeed before they went into labour. By making an early choice, mothers made better intellectual and physical preparation. Relevant information could be attained and the decision made after talking with family members. In this study, the 'almost-all' prevalence of intention to breastfeed was consistent with the respondents' high level knowledge and positive attitudes of towards BF.

The antenatal decision of wanting to breastfeed may not reflect the actual prevalence of BF. Even if a mother was to breastfeed, the commitment of whether it was partial or exclusive and the length of BF was yet to be determined. A study in the neighborhood capital of Bangkok showed that 95% of mothers breastfed their infants up to 3 months, but the prevalence of exclusive BF was relatively low at 62.4% (Li et al.1999). We have no local data on the prevalence of BF among post-partum mothers at 3 months, but it was reported that only 29% of babies in Malaysia were exclusively breastfed for the first 6 months (UNICEF 2005b). The theoretical declining prevalence of BF practice from antenatal to third and sixth months post-partum was an area for further research. The initiation and successful practice of BF may be affected by various factors including the social, psychological,

Table 2: Knowledge of Breastfeeding among respondents

	No. of cases (n=218)	%
Best food for the infant		
Breast milk (BM)	209	95.9
Formula milk	2	0.9
Others	1	0.5
Don't know	6	2.8
BM is good for infant's resistance toward diseases		
Yes	210	96.3
No	4	1.8
Don't know	4	1.8
BF increases maternal and child bonding		
Yes	212	97.2
No	3	1.4
Don't know	3	1.4
BF is easy and economical		
Yes	203	93.1
No	8	3.7
Don't know	7	3.2
BF helps mother to recover from childbirth		
Yes	179	82.1
No	3	1.4
Don't know	26	16.5
BM is good to avoid infant's allergy	=0	
Yes	183	83.9
No	10	4.6
Don't know	25	11.5
BM is a well-balanced nourishing food	20	11.0
Yes	212	97.2
No	3	97.2 1.4
Don't know	3	1.4
	3	1.4
BM helps infant's teeth development Yes	140	64.2
No	-	04.2 1.4
	3	
Don't know	75	34.4
BM fills up the stomach more easily	404	70.0
Yes	161	73.9
No	25	11.5
Don't know	32	14.7
BF helps mother to reduce weight	450	74.0
Yes	156	71.6
No	26	11.9
Don't know	36	16.5
Stop BF when baby and/ or mother sick		
Yes	99	45.4
No	69	31.7
Don't know	50	22.9
Clear fluid should also be given in exclusive BF		
Yes	138	63.3
No	58	26.6
Don't know	22	10.1
Colostrum is good		
	180	82.6
Yes		4.1
-	9	4.1
Yes	9 29	13.3
Yes No Don't know		
Yes No		



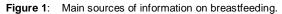


Table 3: Attitude of Breastfeeding among respondents

	No. of cases (n=218)	%
BF is easier than feeding infant formula	, ,	
Yes	188	86.2
No	21	9.6
Don't know	9	4.1
BF has negative effect on marital relationship		
Yes	5	2.3
No	201	92.2
Don't know	12	5.5
BF mother is difficult in taking care of family		
Yes	13	6.0
No	200	91.7
Don't know	5	2.3
Breast-feed baby with modesty anywhere		
Yes	124	56.9
No	84	38.5
Don't know	10	4.6
Start BF straight after delivery		
Yes	215	98.6
No	2	0.9
Don't know	1	0.5
Ban the use of bottles and teats in any hospital		
Yes	149	68.3
No	51	23.4
Don't know	18	8.3
Community encourages BF		
Yes	185	84.9
No	23	10.6
Don't know	10	4.6
Stop BF if husband discouraged		
Yes	23	10.6
No	181	83.0
Don't know	14	6.4

environmental and practical barrier. Each country with its own policy, race, culture and religion could have different perception on infant feeding. In Northern Ireland, the main barriers to BF were incompatible social norms, making it difficult for mothers to breastfeed successfully (Stewart-Knox et al. 2003).

Out of 218 respondents, 163 (74.8%) were knowledgeable about breastfeeding with total score of more than 70%. They knew that colostrum and breast milk was the best food, good for resistance against disease and allergy, filling up stomach easily, helpful in teeth development and maternal recovery after birth, increased bonding, was easy and economical. A study in Vietnam showed that mothers were less aware of the advantages of BF in helping the mother to recover from childbirth and that it helped infant's teeth development (Li et al. 2002).

In this study the respondents had two main wrong perception i.e. discontinuation of BF when baby and/or mother was sick and clear fluid was unnecessarily administrated in exclusively breast-fed infants. These misconceptions could be influenced by social and cultural beliefs. Public education or breastfeeding campaigns should therefore address these misconceived issues appropriately.

A high percentage of respondents (83.90%) showed positive attitude towards BF i.e. being easier than infant formula, had no negative effect on marital relationship or family care, would commence breastfeeding straight after delivery, agreeable to the banning of bottles and teats in hospital and they would not stop breastfeeding even if the husband discouraged them. This was an encouraging finding among urban mothers-to-be. A study in Baghdad among medical professionals showed that only 76.8% of general practitioners, 70.1% of resident doctors and 68.8% of medical students had a positive attitude towards BF (AI-Nassaj et al 2004).

Although the attitude towards breastfeeding was generally positive, only 56.9% of respondent thought it was appropriate for a mother to breastfeed her baby with modesty anywhere. This was probably due to our social environment, cultural and religious sensitivity. The respondents may believe that self-embarrassment, inadequate public facilities in providing privacy while BF and difficulty when mothers were working outside home, were barriers towards BF anywhere. This practical issue should be addressed when promoting BF. Antenatal education about the practice of breastfeeding, milk expression and storage may encourage mothers to continue BF anywhere even in the work place.

This study showed the strength of mass media in disseminating information in urban society. About one third of mothers (34.9%) gathered BF information from television programs, magazine, newspaper and Internet establishing that BF information could be effective via public education through the mass media. Another one third of the respondents stated the main source of BF information was organised from antenatal class by midwives and nurses in the hospitals and health care centres (32.1%). Comparing to the Bangkok study, there was much room for improvement as 73.3% of the mothers had already taken courses on breastfeeding and childcare prenatal or postpartum (Li et al.1999). Both antenatal and postnatal education program were influential in achieving successful BF (Hover & Horvet 2000).

CONCLUSION

Most mothers were knowledgeable and had positive attitudes towards BF. The misconception and negative attitudes had been identified and should be addressed appropriately by the NGO and Ministry of Health. Mass media and antenatal class were the main source of information and should be used to promote BF.

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